V.—*The Huron-Iroquois of Canada, a Typical Race of American Aborigines.*

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In a previous communication to the Royal Society of Canada I submitted some general considerations of the ethnical characteristics, and of the condition and relative status, of the aborigines of North America. In that, I aimed at a brief summary of their general aspect as the indigenous American stock upon whom, during the last three and a half centuries the same Aryan race has intruded, which in older and prehistoric centuries displaced indigenous races of Europe not without some analogous results. I now propose to glance at one of the most characteristic types of the American aborigines, which appears, according to their own traditions, to be of Canadian origin; and which, as one important branch of the common stock, claims our special consideration as preeminently the historical native race of Canada.

I have already submitted the reasonings by which I have been led to the conclusion that, throughout the whole North American continent, from the Arctic circle to the Mexican Gulf, no trace has been recovered of the previous existence of anything that properly admits of the term "native civilization." The rude arts of Europe's stone age belong to a period lying far behind its remotest traditions: unless we appeal to the mythic allusions of Hesiod, or to such poetic imaginings as the "Prometheus" of Æschylus. But all available evidence thus far serves to show that the condition of the native tribes throughout the whole area of this northern continent has never advanced beyond the stage which finds its apt illustration in the rude arts of their stone period, including the rudimentary efforts at turning to account their ample resources of native copper without and use of fire.

But this uniformity in the condition and acquirements of the native tribes, and the consequent resemblance in their arts, habits, and mode of life, have been the fruitful source of misleading assumptions. Everywhere the early European explorers met only rude hunting and warring tribes, exhibiting such slight variations in all that first attracts the eye of the most observant traveller, that an exaggerated idea of their ethnical uniformity was the not unnatural result. So soon as the systematizings of the ethnologist led to the differentiation of races, the American type was placed apart as at once uniform and distinctive; and, strange as it may now seem, this idea found nowhere such ready favour as among those who had the fullest access to the evidence by which its truth could be tested. It was the most important and comprehensive induction of the author of "Crania Americana," as the fruit of his conscientious researches in American craniology. The authors of "Indigenous Races of the Earth" and "Types of Mankind," no less unhesitatingly affirmed that "identical characters pervade all the American races, ancient and modern, over

the whole continent."[1] In this they were sustained by the high authority of Agassiz, who, after discussing in his "Provinces of the Animal World, and their relation to Types of Man," the fauna peculiar to the American continent, and pointing out the much greater uniformity of its natural productions, when its twin continents are compared with those of the eastern hemisphere, thus summed up the result of his investigations: "With these facts before us, we may expect that there should be no great diversity among the tribes of man inhabiting this continent; and indeed the most extensive investigation of their peculiarities has led Dr. Morton to consider them as constituting but a single race, from the confines of the Esquimaux down to the southernmost extremity of the continent. But, at the same time, it should be remembered that, in accordance with the zoological character of the whole realm, this race is divided into an infinite number of small tribes, presenting more or less difference one from another." It was natural and reasonable that the men of the sixteenth century should believe in Calibans, or Ewaipanoma, "the Anthropophagi, and men whose heads do grow beneath their shoulders." America was to them, in the most literal sense, another world; and it was easier for them to think of it as peopled with such monstrosities, than with human beings like ourselves. But it is curious to note in this nineteenth century the lingering traces of the old sentiment; and to see men of science still finding it difficult to emancipate themselves from the idea that this continent is so essentially another world, that it is inconceivable to them that the races by which it is peopled should bear any affinity to themselves or to others of the old world. American ethnologists long clung to the idea of an essentially distinct indigenous race; and Dr. Nott, Dr. Meigs, and other investigators welcomed every confirmation of the view of Dr. Morton as to the occupation of the whole American continent by one peculiar type from which alone the Eskimo were to be excepted, as an immigrant element, possibly—according to the ingenious speculations of one distinguished student of science,—of remotest European antiquity. Professor Huxley in an address to the Ethnological Society in 1869, suggests hypothetically, that the old Mexican and South American races represent the true American stock; and that the Red Indians of North America may be the product of an intermixture of the indigenous native race with the Eskimo. It is noticeable, at any rate, that nearly all writers, however widely differing on other points, follow Humboldt in classing the Eskimo apart as a distinct type. He remarks in his preface to his "American Researches," that "except those which border the polar circle, the nations of America form a single race characterized by the formation of the skull, the colour of the skin, the extreme thinness of the beard, and the straight, glossy hair." Some of the characteristics thus noted are undoubtedly widely prevalent; but the head-form, or "formation of the skull," is the most important; and a careful comparison of the skulls of different tribes has long since modified the opinion expressed by the great traveller and reasserted by distinguished American ethnologists.

In reality, were the typical feature most insisted on as universal as it was assumed to be, it would furnish the strongest argument for classifying the predominant Asiatic and American types as one. All the points appealed to suggest affinity to the Asiatic Mongol. But to this the Canadian race, to which attention is here specially directed, presents a striking exception; and it is deserving of notice that the dolichocephalic head-

[1] Types of Mankind, p. 291.

form is not only characteristic of the Huron-Iroquois stock; but it is prevalent in others of the northern tribes. Recognizing a correspondence, in this and other respects, between the Algonkins and Iroquois, who long divided between them the area of Upper and Lower Canada and the adjacent western territory, Dr. Latham remarks: "The Iroquois and Algonkins exhibit in the most typical form the characteristics of the North American Indians as exhibited in the earliest descriptions, and are the two families upon which the current notions respecting the physiognomy, habits, and moral and intellectual powers of the so-called Red Race are chiefly founded." Of the former, Mr. Parkman, who has studied their later history with the minutest care, says: "In this remarkable family of tribes occur the fullest developments of Indian character, and the most conspicuous examples of Indian intelligence. If the higher traits popularly ascribed to the race are not to be found here, they are to be found nowhere."[1]

The Iroquois were an important branch of the great stock which included also the Hurons, or Wyandots, the native historical race of Canada. But divided as the two were throughout the whole period of French Canadian history by the bitterest antagonism, it is convenient to speak of them under the compound term of Huron-Iroquois; and to the special history of this indigenous stock, with the more general suggestions prompted by their peculiar characteristics as a typical race of American aborigines, attention is here chiefly directed. In doing so it is desirable not only to note the physical geography of the country which they occupied, as a region of forest and lakes; but, still more, to keep in view this fact as a predominant characteristic of the continent, and as one important factor in the evolution of whatever may seem to be peculiar in the aborigines of North America.

The effects resulting from the physical features of a country, on the development and aggregation, or interblending, of its races can nowhere be wisely overlooked. Even within the narrow limits of the British Islands the influences of mountain and lowlands, of the fertile stretches of Kent and the valley of the Thames, the fens of Lincolnshire, the moorlands of Northumbria, and the Welsh and Scottish Highlands, have largely contributed to the endurance, if not in some degree to the development, of ethnical distinctions; as they have undoubtedly been the chief source, not only of the perpetuation, but of the multiplication of diversities in language.

In this respect Britain is an epitome of Europe, with its great mountain ranges, and detached peninsulas, by means of which races have been isolated within well-defined areas, and their languages and other distinctive peculiarities preserved. Russia alone, of all European countries, presents analogies to Central Asia as a region favourable to nomadic life; and in so far as its history differs from that of the continent at large, it accords with such physical conditions. Throughout the whole historic period, as doubtless in prehistoric times, the great chain of mountains reaching from the western spur of the Pyrenees to the Balkans has influenced European progress; while the chief navigable river, the Danube, traversing the continent through one uniform temperate zone, has tended still further to the perpetuation of certain distinctive ethnical characteristics in central and southern Europe. In all its most important geographical features, the

[1] The Jesuits in North America, p. 43.

northern continent of America presents a striking contrast to this. An isosceles triangle with its base within the Arctic circle, it tapers to a narrow isthmus towards the equator. Its great mountain chain runs from north to south, and in near proximity to the Pacific coast; and its chief navigable river, rising within our own Canadian Dominion, and receiving as its tributaries other rivers draining vast regions on either hand, traverses twenty degrees of latitude before it reaches the Gulf of Mexico. Another range of highlands rises towards the Atlantic sea-board, and forms the eastern boundary of the great interior plain. But the Alleghanies or Appalachian system of mountains, though they may be said to extend from the St. Lawrence to the Mexican Gulf, rise only at a few points, as in the White Mountains of New Hampshire, to any great elevation. They form rather a long plateau, intersected by wide valleys; and so diversify the landscape, without constituting strongly defined barriers or lines of demarkation. As a whole, the continent of North America, eastward from the Rocky Mountains, may be described as a level area, so slightly modified by any elevated regions throughout its whole extent, from the Arctic circle to the Gulf of Mexico, as to present no impediment to the wanderings of nomadic tribes. It is interlaced with rivers, and diversified everywhere with lakes, alike available for navigation and for fishing; and, until the intrusion of European immigrants, its forests and prairies abounded with game far in excess of the wants of its population. Everything thus tended to perpetuate the condition of nomadic hunter tribes. This stage of native American history inevitably drew to a close under the influence of European institutions and civilization; but it is interesting to note, that the same absence of any well defined geographical limitations of area, which tended to perpetuate the nomadic habits of the savage, has aided in consolidating the great confederacy of the United States, and maintaining an ethnical and political conformity throughout the North American continent in striking contrast to the diversities in race and political institutions in Europe.

History and native traditions alike confirm the idea that the valley of the St. Lawrence was the habitat of the Huron-Iroquois stock as far back as evidence can be appealed to. The Huron traditions tell of a time when the Province of Quebec was the home of the race eastward to the sea; while those of three at least of the members of the Iroquois confederacy in legendary fashion claimed their birth from the soil south of the great river. When the French explorers, under the leadership of Jacques Cartier, first entered the St. Lawrence, in 1535, they found at Stadacone and Hochelaga—the old native civic sites now occupied by the cities of Quebec and Montreal,—a population apparently of the Huron-Iroquois stock; and, in so far as reliance may be placed on their traditions, Canada was then populous throughout the whole valley of the St. Lawrence with industrious native tribes, the representatives of a race that had occupied the same region for unnumbered centuries. "Some fanciful tales of a supernatural origin from the heart of a mountain; of a migration to the eastern sea-board; and of a subsequent return to the country of the lakes and rivers, where they finally settled, comprise," says Brownell,[1] "most that is noticeable in the native traditions of the Six Nations prior to the grand confederation." But the value of such traditionary transmission of national history among unlettered tribes has received repeated confirmation; and the incidents of their own famous league, perpe-

[1] The Indian Races of North and South America, p. 286.

tuated with circumstantial minuteness in the traditions of the Iroquois, are assignable apparently to the earlier half of the fifteenth century. The older event of the overthrow of the Alligéwi, in the Ohio valley, of which independent traditional records have been handed down by the Lenni Lenape, or Delawares, and by the Iroquois, is believed to be correctly assignable to a date nearly contemporaneous with the assumption of the authority of bretwalda of the Heptarchy by Egbert of Wessex,—that memorable step in the fusion of "nations" not greatly more important than those of the Iroquois league, until their divisions in speech and polity were effaced in the unity of the English people. As to "the fanciful tale of a supernatural origin from the heart of a mountain," it is simply a literal rendering of the old Greek metaphor of the autochthones, or children of the soil, symbolized by the Athenians wearing the grasshopper in their hair; and is by no means peculiar to the Iroquois. Mr. Horatio Hale derived from Manderong, an old Wyandot chief, the story, as narrated to him by the Hurons of Lorette. They took him, he said, to a mountain, and showed him the opening in its side from whence the progenitors of the people emerged, when they "first came out of the ground."[1] The late Huron chief, Tahourenche, or Francois Xavier Picard, communicated to me the same legendary tradition of the indigenous origin of his people; telling me, though with a smile, that they came out of the side of a mountain between Quebec and the great sea. My informant connected this fact with other incidents, all pointing to a traditional belief that the northern shores of the lower St. Lawrence were the original home of the race; and he spoke of certain ancient events in the history of his people as having occurred when they lived beside the big sea. The earliest authentic reference to this tradition occurs in the "Relations" for 1636, where Brebeuf, after a brief allusion to certain of their magical songs and dances, says: "The origin of all such mysteries is assigned by them to a being of superhuman stature, who was wounded in the forehead by one of their nation, at the time when they lived near the sea." The reference to a migration from the sea-board obviously points to one of those incidents in the life of the nation which marked for them an epoch like the Hegira of the Arabs. When Champlain followed Cartier nearly seventy years later he found only a few Algonkins in their birch-bark wigwams, where the palisaded towns of the Huron-Iroquois had stood. But no Algonkin legend claims this as their early home. The invariable tradition of the Ojibways points to the Lake Superior region and the country stretching towards Hudson Bay, as the ancestral home of the Algonkin tribes.

Such information as can thus be gleaned from many independent sources, as from the somewhat confused yet trustworthy narrative of David Cusick, the Tuscarora historian, and from Peter Dooyentate, the Wyandot historian, all leads to the same conclusion. From remote and altogether pre-Columbian centuries, the Hurons and other allied tribes—the occupants in the seventeenth and eighteenth centuries of various detached portions of the country north of the St. Lawrence and eastward of the Georgian Bay,—appear to have been in possession of the whole region to which their oldest traditions pointed as the cradle of the race; while nations of the Algonkin stock lay beyond them to the north-west. The great river and the lakes from whence it flows into the lower valley formed a well-defined southern boundary for affiliated tribes; but the first Dutch and English explorers of the Hudson, and of the tract of country which now

[1] Magazine of American History, vol. x., p. 479.

constitutes the western part of the State of New York, found the river valleys and lake shores in occupation of the Iroquois confederacy, then consisting of Mohawks, Oneidas, Onondagas, Cayugas and Senecas. These constituted the five nations of the famous Iroquois league. But the Hurons of Canada, with whom they were latterly at deadly feud, appear to have been the oldest representatives of the common race, and were still in occupation of their ancestral home when Cartier first explored the St. Lawrence. The same race had spread far to the south; and its representatives, in detached groups, long continued to perpetuate its influence. These included the Conestogas or Andastes, the Andastogues, the Carantouans, the Cherohakahs or Nottoways, the Tuscaroras, and others, under various names. It is not always easy to recognize the same tribe under its widely dissimilar designations. The Susquehannocks of the English and the Minquas of the Dutch, appear to be the Andastes under other names, and Champlain's Carantouans may have been the Eries. Under those and other names the Huron-Iroquois stock extended to the country of the Tuscaroras in North Carolina. Still farther south Gallatin surmised, from linguistic evidence, a connection between the Cherokees and the Iroquois.[1] This fact Mr. Hale has placed beyond doubt; and having detected in the language of the former a grammatical structure mainly Huron-Iroquois, while the vocabulary is to a great extent foreign, he is inclined to think that we thus recover traces of a people, far south in Alabama and Georgia, the descendants of refugees of the conquered Alligewi, adopted into one of the nations of their Iroquois conquerors.[2]

From one after another of the outlying southern offshoots of the common stock, additions were made from time to time, to restore the numbers of the decimated Iroquois. Westward of the confederacy was the country of the Eries, an offshoot of the Seneca nation, occupying the southern shore of the great lake which perpetuates their name. Immediately to the north of the Eries, within the Canadian frontier, the Attiwendaronks, or Neuters, occupied the peninsula of Niagara, while the Tionntates or Petuns, and other tribes of the same stock, were settled in the fertile region between Lakes Erie and Huron. In 1714, the Tuscaroras, when driven by the English out of North Carolina, were welcomed by their Iroquois kinsmen, and received into the league which thenceforth bore the name of the Six Nations. Towards the middle of the same century the waste of war made them ready to welcome any additions to their numbers; and the Tuteloes and Nanticokes, both apparently Algonkin, furnished fresh accessions to the diminished numbers of the confederacy, but without taking their place as distinct nations.

But of all the nations of the stock thus widely spread westward and southward, the Hurons are the native historical race of Canada, intimately identified with incidents of its early settlement, and of friendly intercourse with *La Nouvelle France*. Their language is now recognized as the oldest form of the common speech of the Huron-Iroquois, and it is not creditable to Canadian philologists that its grammar still remains unrepresented in any accurate printed form. The Literary and Historical Society of Quebec did, indeed, publish in its Transactions, in 1831, the translation of a Latin MS., compiled with much industry by a missionary who had laboured among the Hurons of Lorette, and whose anonymous work was found amongst the papers of the mission. But it is the production

[1] Archæologia Americana, vol. ii., p. 173.
[2] Indian Migrations, p. 17.

of one ignorant of the science of language, and gives no adequate idea either of the grammatical structure or of the variety and richness of the Huron tongue.

The languages or dialects spoken by many native Indian tribes have undoubtedly perished with the races to which they pertained; but the numerous Huron-Iroquois dialects still existing, not only in written form, but as living tongues, afford valuable materials for ethnical study. The history of other Indian tribes abundantly accounts for the multiplication of a minute diversity of languages so specially characteristic of the American continent, with the endless subdivisions of its indigenous population into petty tribes, kept apart by internecine feuds. The number of native American languages is estimated by Vater, in his *Linguarum Totius Orbis Index*, at about five hundred. But the question forthwith arises: What shall be regarded as constituting a language? For, in the wanderings of little bands of Indian nomads, dialects multiply indefinitely. Nearly six hundred of such are catalogued by Mr. Bancroft, in his "Native Races of the Pacific States," as spoken between Alaska and the Isthmus of Panama.

Here then is a field for much useful research, with the promise of valuable results. The subject is rendered more attractive owing to the fact that, of nearly all the nations of the North American continent, their languages are the only surviving memorials of the race. Already, under the efficient supervision of the Ethnographic Bureau of the United States, systematic contributions are being secured for this important branch of knowledge, so far as their own geographical area is concerned. A no less important area is embraced in the Dominion of Canada, and it is peculiarly incumbent on the Royal Society to urge on the attention of the Government the necessity for timely action in this matter. In our own Northwest, and in British Columbia, languages are disappearing and races becoming extinct. Mr. Hale recently contributed to the American Philosophical Society's transactions, a valuable monogram on the Tutelo tribe and language, derived mainly from Nikonha, the last full-blood Tutelo, who survived till upwards of an hundred years of age. He was married to a Cayuga woman, and lived among her people on their Grand River reserve near Brantford. "My only knowledge of the Tuteloes," says Mr. Hale, "had been derived from the few notices comprised in Gallatin's Synopsis of the Indian Tribes, where they are classed with the nations of the Huron-Iroquois stock. At the same time the distinguished author, with the scientific caution which marked all his writings, is careful to mention that no vocabulary of the language was known. That which was now obtained showed, beyond question, that the language was totally distinct from the Huron-Iroquois tongues, and that it was closely allied to the language of the Dakota family."[1] But for this timely exertion of a philological student, this interesting link in the history of the Huron-Iroquois relations with affiliated tribes would have been lost beyond recall.

Now or never, much work of this same kind has to be done; nor would the requisite organization be difficult to secure. A systematic cooperation of some sections, or of the council of this society, with officers of the Indian Department and those of the Geological and Natural History Survey of the Dominion, would furnish workers available for accomplishing results for the native tribes of Canada similar to the data now being so efficiently accumulated in reference to the Indian tribes of the United States. Already,

[1] The Tutelo Tribe and Language, p. 9.

with the sanction of the director of the Geological Survey, comparative vocabularies of Indian tribes of British Columbia have been collected by Dr. George M. Dawson, and Mr. W. Fraser Tolmie, which form a valuable contribution to Canadian ethnography. Much has yet to be done before the multifarious dialects can be reduced to form, and classified in distinct groups pertaining to their determinate stocks. Some are mere dialects, such as the prevailing condition of nomad life so largely tends to develop, owing to the frequent breaking up of dismembered tribes, or the adoption of refugees, or survivors of conquered tribes, into the larger band. This peculiarly tends to beget an intermingling of vocabularies, and new modifications of speech. Others have only acquired their dialectic character in the scattering of tribes broken up into small bands, and consequently present a very limited range of vocabulary. Until recently the tendency has been to assume an underlying unity of speech for the whole American languages, based on the polysynthetic, or holophrastic characteristic ascribed to the whole; just as by an exaggerated estimate of the prevalence of a predominant head-form, one physical type was long assumed to characterize the American race from Hudson Bay to Terra del Fuego. Perhaps, so far as language is concerned, the present tendency is towards the opposite extreme. Major Powell, the efficient chief of the Ethnographical Bureau at Washington, recognizes eighty groups of languages in North America, between which no affinity is thus far apparent. Fifty-five of those he believes to be satisfactorily determined as distinct stocks. On the other hand, Professor Whitney, after noticing the complexity of the enquiry when directed to the native American languages, thus proceeds: "Yet it is the confident opinion of linguistic scholars that a fundamental unity lies at the base of all these infinitely varying forms of speech; that they may be, and probably are, all descended from a single parent language."[1]

The history of the Huron-Iroquois race, and especially of the Six Nation Indians, since the settlement of the main body for the past century on their reserves on the Grand River, in the Province of Ontario, curiously illustrates the pertinacity with which they have cherished the dialectic varieties of a common tongue. But while the essential differences of language everywhere constitute one of the most obvious distinctions of race: it is interesting to note the recognition by the Indians of affinities of dialects, and the distinction between even remote kinship based on such evidence, and a radical diversity in language and race; as in the readmission of the Tuscaroras to the Iroquois family of nations. According to Brebeuf, the kinship of the Attiwendaronks of the Niagara peninsula was recognized by the Hurons in that designation, which classed them by a name signifying a "people of a language a little different."[2] Peter Jones Kahkewaquonaby, a civilised Ojibway, adopted into the Mohawk nation, in speaking of the traditions of the Indians as to their own origin, says: "All the information I have been able to gain in relation to the question amounts to the following. Many, many winters ago the Great Spirit, Keche-Manedoo, created the Indians. Every nation speaking a different language is a second creation, but all were made by the same Supreme Being."[3]

Among the races of the northern continent, none more fitly represent their special characteristics, east of the Rocky Mountains, than the great Huron-Iroquois family. Their

[1] Whitney's Study of Language, p. 318.

[2] Relation, 1641, p. 72.

[3] Peter Jones and the Ojebway Indians, p. 31.

language is remarkable for its compass and elaborate grammatical structure; and the numerous dialects of the common mother tongue furnish evidence of migration and conquest over a wide region eastward of the Mississippi. To such philological evidence many enquirers are now turning for a clue to the origin of the races of the New World; and for the recovery of proofs of their affinity to one or other of the Old World stocks. Professor Whitney, after dwelling on the "exaggeratedly agglutinative type" of the ancient Iberian language, and its isolation among the essentially dissimilar languages of Aryan Europe, thus proceeds: "The Basque forms a suitable stepping-stone from which to enter the peculiar linguistic domain of the New World, since there is no other dialect of the Old World which so much resembles in structure the American languages;"[1] not indeed, as he adds, that they are all of accordant form; for he pronounces the grouping of them in a single great family as "a classification of ignorance."

The analogy thus indicated has been viewed with favour by Mr. Horatio Hale, as a valuable hint pointing in that direction to the recovery of possible traces of the pre-Aryan languages of both continents. "In Western Europe," he remarks, "one community is known to exist, speaking a language which, in its general structure, manifests a near likeness to the Indian tongues. Alone, of all the races of the old continent, the Basques or Euskarians of northern Spain and south-western France have a speech of that highly complex and polysynthetic character which distinguishes the American languages."[2] But at the same time Mr. Hale adds with discriminating care: "There is not, indeed, any such positive similarity in words or grammar as would prove a direct affiliation. The likeness is merely in the general cast and mould of speech;" such as, on any theory of linguistic affinity, is alone to be looked for in the languages of races separated no less by vast intervals of time than of space. Nevertheless, this element of correspondence common to both is sufficiently marked to attract much attention. We have as yet, however, barely reached the threshold of this all-important enquiry; and find at every step only fresh evidence of the necessity for the diligent accumulation of all available materials before the native races of our own Dominion, and those of the neighbouring States, perish, and their languages pass beyond recall.

Nothing but patient accumulative research and study of the vocabularies and grammatical structure of the native American languages will yield any immediate results of practical value. Comparison with the languages of the old world, even where they seem to yield traces of relationship, has thus far served only to confirm the evidence of the remote date at which separation took place between the Asiatic, or other old world stocks, and their American congeners. Speculation accordingly finds ample room for fancy to sport with the uncertain clue. So far as the more northern tribes are concerned, Mr. Clements Markham would trace their affinities to the nomads of Siberia. Mr. Hyde Clarke, taking the recently deciphered Akkad for the typical language of the original wanderers from their Asiatic fatherland, assumes one branch of it to have passed to India and Indo-China, and thence by way of the Pacific islands to America. These movements, to which the grammatical forms of Malay-Polynesian appear to lend some countenance, are referred to a remote era of Asiatic civilization, during which the maritime enterprise of the Pacific may have been carried on to an extent unknown to modern Malay navigators. So, in like

[1] The Life and Growth of Languages, p. 259.

[2] Indian Migration as evidenced by Languages, p. 24.

manner. Professor John Campbell seeks in the same obscure dawn for some philological traces of long-forgotten Hittite migrations, such as may harmonize with the idea of the mythic Atlantides, the people of a continent once stretching westward into the Atlantic main. But the interval to be bridged over, between such remote traces of Asiatic or other affinities and the oldest of Iroquois traditions, is too vast to hope for any present aid from the latter source. But if Akkad, Hittite, Egyptian, Phœnician, or other of the world's grey-fathers, transplanted to America the germs of its long indigenous stock, we look in vain for any traces of their old-world civilization north of the Mexican Gulf. Nor is it by any means an established truth that the indigenous arts of Central America or Peru are of any very great antiquity. Their metallurgy was at a crude, yet suggestive, stage at which it was not likely to be long arrested. The same may be said of their hieroglyphic records; though they certainly present some highly significant analogies to the Chinese phase of word-writing, calculated, along with other aspects of resemblance to that peculiar stage of partial, yet long-enduring, civilization of which China is the Asiatic examplar, to modify our estimate of the possible duration of Central and Southern American civilization. Nevertheless the assumption of an antiquity in any degree approximating to that of Egypt seems to me irreconcilable with the evidence. Their architecture was barbaric, though imposing from the scale on which their great temples and palaces were built. In Central America especially, the aggregation of numerous ill-lighted little chambers, like honey-combed cells excavated out of the huge pile, is strongly suggestive of affinity to the Casas Grandes, and the Pueblos of the Zuñi: and this is confirmed by the correspondence traceable between many of their architectural details and the ornamentation of the Pueblo pottery.

The astronomy and the calendars, both of Mexico and Peru, with their detailed methods of recording their divisions of time, are all suggestive of an immature phase of civilization in the very stage of its emergence from barbarism, modified, in some cases, by the recent acquisition of certain arts. As to the peculiar phase of Mexican art, and whatever other evidence of progress Mexico supplies, they appear to me no more than natural products of the first successful intrusion of the barbarians of the northern continent on the seats of tropical civilization. Certain it seems, at least, that if an earlier native civilization had ever existed in the north, or if the representatives of any type of old world civilization were present there in numbers for any length of time, some traces of their lost arts must long since have come to light.

But the conservative power of language is indisputable, and the evidence of the origin or affiliation of races, which it supplies, surpasses all other kinds of proof. The study of the ancient languages of India has opened up a boundless field of research. The affinities of language preserve subtle traces of unheeded relations; and if the kinship now claimed for the polysynthetic languages of both hemispheres be correct, we are only on the threshold of significant disclosures. The Huron-Iroquois tongue, in its numerous ramifications, as well as some of the native languages that have outlived the last of the races to which they belonged, may preserve traces of affinities as yet unrecognized. But we must be content at the present stage to accumulate the needful materials; to master the history of the races of our own Dominion; and to determine, as far as possible, their affinities to each other, and to the typical stocks of the northern continent. When this has been accomplished, we shall still have to await the careful inductions of

philological science before we can hope for any trustworthy solution of the problem of which philology undoubtedly offers the most hopeful key.

In no respect are the Huron-Iroquois more correctly adducible as a typical race of American aborigines than in the absence of all evidence of their ever having acquired any of the arts upon which civilization depends. We look in vain in their vocabularies for terms of science, or for names adapted to the arts and manufactures on which social progress depends. But they had developed a gift of oratory, for which their language amply sufficed, and from which we may infer the presence in this race of savages of latent powers, capable of wondrous development. "Their languages show, in their elaborate mechanism, as well as in their fulness of expression and grasp of thought, the evidence of the mental capacity of those who speak them. Scholars who admire the inflections of the Greek and Sanscrit verb, with their expressive force and clearness, will not be less impressed with the ingenious structure of the verb in Iroquois. It comprises nine tenses, three moods, the active and passive voices, and at least twenty of those forms which in the Semitic grammars are styled conjugations. The very names of these forms will suffice to give evidence of the care and minuteness with which the framers of this remarkable language have endeavoured to express every shade of meaning. We have the diminutive and augmentative forms, the cis-locative and trans-locative, the duplicative, reiterative, motional, causative, progressive, attributive, frequentative, and many others."[1] To speak, indeed, of the Iroquois as, in a consciously active sense, the framers of all this would be misleading. But it unquestionably grew up in the deliberations around the council fire, where the conflicting aims of confederate tribes were swayed by the eloquence of some commanding orator, until the fiercest warrior of this forest race learned to value more the successful wielding of the tongue in the *Kanonsionni*, or figurative Long House of the League, even than the wielding of the tomahawk in the field. At the organization of the confederacy, the Canyengas or Mohawks were figuratively said to have "built a house," *rod'nonsonnih*, or rather to have "built the long house" in which the council fire of the Five Nations was kindled. Of this the Senecas, lying on the extreme west, were styled the "door-keepers," and the Onondagas, whose territory was central, were the custodians. The whole usage is rhetorical and figurative. Under such influences the language of the Huron-Iroquois was framed, and it grew rich in emotional and persuasive forms. It only needed the evolution of a true alphabet out of the pictorial symbolism on their painted robes or the grave posts of their chiefs, to inaugurate a literature which should embody the orations of the Iroquois Demosthenes, and the songs of a native Homer, for whom a vehicle of thought was already prepared, rich and flexible as poet could desire.

So far as the physical traits of the American aborigines furnish any evidence of ethnical affinity they unquestionably suggest some common line of descent with the Asiatic Mongol; and this is consistent with the agglutinate characteristics common to a large class of languages of both continents. But, on the other hand, the characteristic head-form of the Huron-Iroquois, as well as that of Algonkin and other northern tribes, deviates alike from the brachycephalic type of the southern Indian nations of this con-

[1] Hale's Indian Migrations as evidenced by Language, p. 3.

tinent, and from that of the Asiatic Mongols. Humboldt, who enjoyed such rare opportunities for studying the ethnical characteristics of both continents, but to whom, nevertheless, the northern races, with their dolichocephalic type of head were unknown, dwells, in his "American Researches," on the striking resemblance which the American race bears to the Asiatic Mongols. Latham classes both under the common head of Mongolidæ; and Dr. Charles Pickering, of the American Exploring Expedition, arrived at the same conclusion as the result of his own independent study of the races of both continents. Nevertheless, however great may be the resemblance in many points between the true Red Indian and the Asiatic Mongol, it falls short of even an approximate physical identity. The Mongolian of Asia is not indeed to be spoken of as one unvarying type, any more than the American. But the extent to which the Mongolian head-form and peculiar physiognomy characterize one widely diffused section of the population of the eastern continent, gives it special prominence among the great ethnical divisions of the human race. Morton assigns 1421 as the cranial capacity of eighteen Mongol, and only 1234 as that of one hundred and sixty-four American skulls other than Peruvian or Mexican. Dr. Paul Topinard, in discussing the American type, adds: "If we are to rely on the method of cubic measurement followed by Morton, the American skull is one of the least capacious of the whole human race."[1] But Dr. Morton's results are in some respects misleading. The mean capacity yielded by the measurements of 214 American skulls in the Peabody Museum of Archæology, including a considerable number of females, is 1331; and with a carefully selected series, excluding exceptionally large and small crania, the results would be higher. Twenty-six male California skulls, for example, yield a mean capacity of 1470. The Huron-Iroquois crania would rank among such exceptional examples.[2] The forehead is, indeed, low and receding, but the general cerebral capacity is good; and Dr. Morton specially notes its approximation to the European mean.[3]

But any idea of simple uniformity in the ethnical characteristics of the various races of North and South America is untenable. All probabilities rather favour the idea of different ethnical centres, a diversity of origin, and considerable admixture of races. All evidence, moreover, whether physical or philological, whatever else it may prove, leaves no room for doubt as to a greatly prolonged period of isolation of the native races of the New World. Whether they came hither from the Mediterranean, in that old mythic dawn the memory of which survived in the legend of a submerged Atlantis; or the history of their primeval migration still lingers among the fading traces of philological affinity with the Basques; or if, with the still more remote glimpses which the arctic fauna of the New World supplies, we seek to follow the palæolithic race of central Europe's reindeer period in the long pilgrimage to Behring Straits, and so to the later home of the American Mongol: this, at least, becomes more and more obvious, that they brought with them no arts derived from the ancient civilizations of Egypt or of Asia. So far, at least, as the northern continent is concerned, no evidence tends to suggest that they greatly differed at any earlier period from the condition in which they were found

[1] Anthropology, by Dr. Paul Topinard; Eng. Trans., p. 480.
[2] "The Huron Race and Head-form." N. S. *Canadian Journal*, vol. xiii., p. 113.
[3] Crania Americana, p. 195.

by Cartier when he first entered the St. Lawrence. They were absolutely ignorant of metallurgy; and notwithstanding the abundance of pure native copper accessible to them, they cannot be said even to have attained to that rudimentary stage of metallurgic art which for Europe is spoken of as its "Copper Age." Copper was to them no more than a malleable stone, which they fashioned into axes and knives with their stone hammers. Their pottery was of the most primitive crudeness, hand-fashioned by their women without the aid of the potter's wheel. The grass or straw-plaiting of their basket-work might seem to embody the hint of the weaver's loom; but the products of the chase furnished them with skins of the bear and deer, sufficient for all purposes of clothing. They had advanced in no degree beyond the condition of the neolithic savage of Europe's Stone Age, when at the close of the fifteenth century they were abruptly brought into contact with its cultured arts. The gifted historian, Mr. Francis Parkman, who has thrown so fascinating an interest over the story of their share in the long protracted struggle of the French and English colonists of North America, says of them: "Among all the barbarous nations of the continent the Iroquois stand paramount. Elements which among other tribes were crude, confused, and embryotic, were among them systematized and concreted into an established polity. The Iroquois was the Indian of Indians. A thorough savage, yet a finished and developed savage. He is perhaps an example of the highest elevation which man can reach without emerging from his primitive condition of the hunter." Yet with this high estimate of the race as preeminent among Red Indian nations, he adds: "That the Iroquois, left under their institutions to work out their destiny undisturbed, would ever have developed a civilization of their own, I do not believe."[1] They had not, in truth, taken the first step in such a direction; and, were it not for the evidence which language supplies, it would be conceivable that they, and the whole barbarian nations of America, of which they are a type, were Mongol intruders of a later date than the Northmen of the tenth century: who, it seems far from improbable, encountered only the Eskimo of the Labrador coast, or their more southern congeners, then extending considerably to the south of the St. Lawrence. The prevalence of a brachycephalic type of head among southern Indian tribes, while dolichocephalic characteristics are common to the Eskimo and to the Huron-Iroquois and other northern Indian nations, lends some countenance to the idea of the latter being the product of an intermixture of Red Indian and Eskimo blood. The head-forms, however, though both long, differ in other respects; and there is a like divergence apparent on comparing the bones of the face, with a corresponding difference in their physiognomy.

Dr. Latham, as already noted, finds in the Iroquois one of the most typical families of the North American race, and Mr. Parkman styles them "the Indian of the Indians." The whole Huron-Iroquois history illustrates their patient, politic diplomacy, their devotion to hunting and to war. But their policy gave no comprehensive aim to wars which reduced their numbers, and threatened their very existence as a race. Throughout the entire period of any direct knowledge of them by Europeans, there is constant evidence of the rise of feuds between members of the common stock, due in part, indeed, to their becoming involved in the rivalries of French and English colonists, but also traceable to hereditary animosities perpetuated through many generations. The strongly marked

[1] The Jesuits in North America, p. 47.

diversities in the dialects of the Six Nations is itself an evidence of their long separation, prior to the date of their confederation, which is believed to have been effected in the earlier half of the fifteenth century. By far the most interesting and trustworthy narrative of this famous league is embodied by Mr. Horatio Hale in "The Iroquois Book of Rites," a contribution to aboriginal American literature of singular interest and value. Among the members of this confederacy the Tuscaroras occupy a peculiar position. They were reunited to the common stock so recently as 1714, but their traditions accord with those of the whole Huron-Iroquois family in pointing to the Lower St. Lawrence as their original home; and the diversity of the Tuscarora dialect from those of the older nations of the league furnishes a valuable gauge of the significance of such differences, as evidence of the length of period during which the various members of the common stock had been separated. On the other hand, the manner in which, in the absence of any hereditary feud, the Iroquois respected the bonds of consanguinity, and welcomed the fugitive immigrants from North Carolina, throws an interesting light on the history of the race, and the large extent of country occupied by it in the time of its greatest prosperity.

The earliest home of the whole Huron-Iroquois stock was within the area latterly embraced in Upper and Lower Canada, and, therefore, they have a peculiar claim on the interest of Canadians as our precursors in the occupation of the soil; while, in so far as its actual occupancy by the representatives of the common stock is concerned, the Hurons were welcomed to a friendly, if fatal, alliance with the early French colonists; and the Iroquois of the Six Nations have enjoyed a home, under the protection of England, on the western Canadian reserves set apart for their use a century ago.

There is one notable inconsistency in the traditions of the Huron-Iroquois which is significant. The fathers of the common stock dwelt, in such times as their oldest and most cherished traditions preserved in memory, in their northern home on the St. Lawrence, and beside the great sea. It ranked also among the ancient traditions of the "Wampum-keepers," or official annalists, that there came a time when, from whatever cause, the Caniengas—Ka-nyen-ke-ha-ka, or Flint people, *i. e.*, the Mohawks,—the "eldest brother" of the family, led the way from the northern shore of the St. Lawrence to their later home in what is now the State of New York. But the remote and prehistoric character of this later tradition is shown by the fact that the Oneidas, Onondagas and Senecas, all claimed for themselves the character of autochthones in their later home. The precise spot where, according to the cherished legend of the Oneidas, they literally sprang from the soil, is still marked by "the Oneida Stone," a large boulder of flesh-coloured syenite, from which the latter called themselves Oniota-aug, "the people begot from the stone." It occupies a commanding site overlooking a fine expanse of country stretching to the Oneida Lake. But, according to Mr. Hale, the name of the Oneida nation, in the council of the league, was *Nihatirontakowa*, usually rendered the "great-tree people," or literally "those of the great log." This designation is connected, most probably as an after-thought, with a legendary meeting of their people with Hiawatha.[1]

The long-enduring league of the Iroquois is foremost among the characteristic features which distinguish this remarkable race of American aborigines from the

[1] Iroquois Book of Rites, p. 78.

Algonkins, and other ruder tribes of North America. The story of this league has been repeated by successive admiring historians, not without rhetorical exaggerations borrowed from the institutions of civilized nations, both of ancient and modern times. Morgan says of this tribal union: "Under their federal system, the Iroquois flourished in independence, and capable of self-protection, long after the New England and Virginia races had surrendered their jurisdictions, and fallen into the condition of dependent nations; and they now stand forth upon the canvass of Indian history, pr eminent alike for the wisdom of their civil institutions, their sagacity in the administration of the league, and their courage in its defence. When their power and sovereignty finally passed away, it was through the events of peaceful intercourse, gradually progressing to this result."[1] Schoolcraft in like manner refers to "their advancement in the economy of living, in arms, in diplomacy, and in civil polity," as evidence of a remote date for their confederacy.[2] But while thus contrasting the "power and sovereignty" of the Iroquois with the "dependent nations" to the south, Schoolcraft leaves it manifest that, even in the seventeenth century, their whole numbers fell short of 12,000, and their warriors or fighting men were carefully estimated in 1677 at 2,150. The diversity of dialects of the different members of the league is a source of curious interest to the philologist; but the fact that, among a people numerically so small, local dialects were thus perpetuated, is a proof of the very partial influence of the league as a bond of union. It serves to illustrate the general defect of native American polity. "Nothing," says Max Müller, "surprised the Jesuit missionaries so much as the immense number of languages spoken by the natives of America. But this, far from being a proof of a high state of civilization, rather showed that the various races of America had never submitted for any length of time to a powerful political concentration.[3] The Iroquois were undoubtedly preeminent in the highest virtues of the savage; and could they have united with their courage and persistency in war some of the elements of progress in civilization ascribed to them, they might have proved the regenerators of the continent, and reserved it for permanent occupation by races of native origin. "Wherever they went," says Schoolcraft, "they carried proofs of their energy, courage and enterprise. At one period we hear the sound of their war-cry along the Straits of the St. Mary's, and at the foot of Lake Superior; at another, under the walls of Quebec, where they finally defeated the Hurons under the eyes of the French."[4] And after glancing at the long history of their triumphs, he adds: "Nations trembled when they heard the name of the Konoshioni."

In older centuries, while the Huron-Iroquois still constituted one united people in their ancestral home to the north of the St. Lawrence, they must have been liable to contact with the Eskimo, both on the north and the east; and greatly as the two races differ, the dolichocephalic type of head common to both is not only suggestive of possible intermixture, but also of evidence of encroachments on the Eskimo in early centuries by this aggressive race. In the sixteenth and seventeenth centuries, as probably at a much earlier date, when the Iroquois had parted from the Wyandots or Hurons, they

[1] League of the Iroquois, p. 4.
[2] Notes on the Iroquois, p. 51.
[3] Lectures on the Science of Language, 5th ed., p. 58.
[4] Notes on the Iroquois, p. 52.

became unquestionably *the* aggressive race of the Northern continent; and were an object of dread to widely severed nations. Their earliest foes were probably the Algonkins, whose original home appears to have been between Lake Superior and Hudson Bay. Nevertheless, there was a time, according to the traditions of both, apparently in some old pre-Columbian century, when Iroquois and Algonkins combined their forces against the Alligéwi, a long extinct stock, whose name survives in that of the Alleghany mountains and river. If the growing belief is well founded that they were the so-called "Mound-Builders" of the Mississippi and Ohio valleys, they must have been a numerous people, occupying a territory of great extent, and carrying on agriculture on a large scale. So far as metallurgy—that crucial test of civilization,—is concerned, they had not advanced beyond the stage of Iroquois progress. But their pottery was greatly superior to any ceramic art of the region around the great lakes; their ingenious carvings in stone have been objects of wide-spread interest: while their singular geometrical earthworks still puzzle the American archæologist, from the evidence they show of skill in a people still practically in their stone period. The only conceivable solution of the mystery, as it seems to me, must be looked for in the assumption that some "Druidic" or Brahminical caste, distinct from the true native Alligéwi stock, ruled in those great northern river-valleys, as in Peru: and, like the mythic Quetzalcoatl of the Aztecs, taught them agriculture, and directed the construction of the marvellous earthworks to which they owe their later distinctive name. But for some unknown reason they provoked the united fury of Iroquois and Algonkins: and after long-protracted strife were driven out, or exterminated. A curious phase of incipient native civilization thus perished: and, notwithstanding all the romance attached to the league of the Six Nations, it is impossible to credit them at any stage of their known history with the achievement of such a progress in agriculture or primitive arts as we must ascribe to this ancient people of the Ohio valley. To the triumph of the Iroquois in this long-protracted warfare may have been due the haughty spirit which thenceforth demanded a recognition of their supremacy from all surrounding nations. Their partial historians ascribe to them a spirit of magnanimity in the use of their power, and a mediatorial interposition among the weaker nations that acknowledged their supremacy. They appear, indeed, to have again entered into alliance with an Algonkin nation in the early period of their league. Their annalists have transmitted the memory of a treaty effected with the Ojibways, when the latter dwelt on the shores of Lake Superior; and the meeting place of the two powerful races was at the great fishing-ground of the Sault Ste. Marie rapids, within reach of the copper-bearing rocks of the Keweenaw peninsula. The league then established is believed to have been faithfully maintained on both sides for upwards of two hundred years. But if so, it had been displaced by bitter feud in the interval between the visits of Cartier and Champlain to the St. Lawrence.

The historical significance given to the legend of Hiawatha by the coherent narrative so ingeniously deduced by Mr. Horatio Hale from the "Iroquois Book of Rites" seems to point to a long past era of beneficent rule and social progress among the Huron-Iroquois. But the era is pre-Columbian and mythic. The pipe of peace had been long extinguished, and the buried tomahawk recovered, when the early French explorers were brought into contact with the Iroquois and Hurons. The history of their deeds, as recorded by the Jesuit Fathers from personal observation, is replete with the relentless ferocity of the

savage. War was their pastime; and they were ever ready to welcome the call to arms. La Salle came in contact with them on the discovery of the Illinois; and Captain John Smith, the founder of Virginia, encountered their canoes on the Chesapeake Bay bearing a band of Iroquois warriors to the territories of the Powhattan confederacy. They were then, as ever, the same fierce marauders, intolerant of equality with any neighbouring tribe. The Susquehannocks experienced at their hands the same fate as the Alligéwi. The Lenapes, Shawnoes, Nanticokes, Unamis, Delawares, Munsees, and Manhattans, were successively reduced to the condition of dependent tribes. Even the Canarse Indians of Long Island were not safe from their vengeance; and their power seems to have been dreaded throughout the whole region from the Atlantic to the Mississippi.

It thus appears probable that in remote centuries, before the discovery of America by European voyagers, the region extending westward from the Labrador coast to Lake Ontario, if not, indeed, to Lake Huron, had been in occupation by those who claimed to be autochthones; though we have now no other knowledge of this than what may be deduced from their own traditions of migration and war. But though thus maintaining a haughty predominancy; so far as their arts afford any evidence of progress, they were in their infancy. The country occupied by them, except in so far as it was overgrown with the forest, was well adapted for agriculture; and the Iroquois and Hurons alike compared favourably with the Algonkins in their agricultural industry. But this work was entirely carried on by the women, while the share of the men in the joint provision of food was the product of the chase. The beautiful region was still so largely under forest that it must have afforded abundant resources for the hunter; but it furnished no facilities for the inauguration of a copper or bronze age, such as the shores of Lake Superior in vain offered to its Algonkin nomads. Of metallic ores they had no knowledge; and while they doubtless prized the copper brought occasionally from Lake Superior, copper implements are rare in the region which they occupied. Their old alliance with the Algonkins of the great copper region had long come to an end; and when they came under the notice of the French and English colonists, the Algonkins had joined with the Hurons as the most powerful and implacable foes of the Iroquois confederacy.

In the ancient warfare in which Algonkins and Huron-Iroquois are found united against the nation of the great river valleys, we see evidences of a conflict between widely distinct stocks of northern and southern origin. It is an antagonism between well-defined dolichocephalic and brachycephalic races. In the dolichocephalic Iroquois or Huron, we have the highest type of the forest savage; no nomad, but maintaining as his own the territory of his fathers, and building palisaded towns for the secure shelter of his people. The brachycephalic Mound-Builder, on the other hand, may still survive in one or other of the members of the semi-civilized village communities of New Mexico or Arizona. But if such attempts at the interpretation of native traditions have any value, they carry us back to pre-Columbian centuries, and tell of long protracted strife, until what may at first have been no more than the aggressions of wild northern races, tempted by the resources of an industrious agricultural community, became a war of extermination. The elaborately constructed forts of the Mound-Builders, no less abundant throughout the Ohio Valley than their curious geometrical earthworks, prove the skill and determination with which the aggressors were withstood, it may be through successive generations before their final overthrow.

The palisaded Indian town of Hochelaga, one of the chief urban centres of the Huron-Iroquois tribes in the older home of the race, and a sample of the later Huron defences on the Georgian Bay, stood, in the sixteenth century, at the foot of Mount Royal, whence the city of Montreal takes its name; and some of the typical skulls of its old occupants, as well as flint implements and pottery from its site, are now preserved in the museum of McGill University. The latter relics reveal no more than had long been familiar in the remains which abound within the area of the Iroquois confederacy, and elsewhere throughout the eastern states of North America. Their earthenware vessels were decorated with herring-bone and other incised patterns; and their tobacco-pipes and the handles of their clay bowls were, at times, rudely modelled into human and animal forms. Their implements of flint and stone were equally rude. They had inherited no more than the most infantile savage arts; and when those were at length superseded, in some degree, by implements and weapons of European manufacture, they prized the more effective weapon, but manifested no desire for mastering the arts to which it was due. To all appearance, through unnumbered centuries, the tide of human life has ebbed and flowed in the valley of the St. Lawrence as unprogressively as on the great steppes of Asia. Such footprints as the wanderers have left on the sands of time tell only of the unchanging recurrence of generations of men as years and centuries came and passed away. Illustrations of native art are now very familiar to us. The ancient flint-pits have been explored; and the flint-cores and rough-hewn nodules recovered. The implements of war and the chase were the work of the Indian brave. His spears and arrowheads, his knives, chisels, celts and hammers, in flint and stone, abound. Fish-hooks, lances or spears, awls, bodkins, and other implements of bone and deer's horn, are little less common. The highest efforts of artistic skill were expended on the carving of his stone pipe, and fashioning the pipe-stem. The pottery, the work of female hands, is usually in the simplest stage of coarse, hand-made, fictile ware. The patterns, incised on the soft clay, are the conventional reproductions of the grass or straw plaiting; or at times, the actual impressions of the cordage or wicker-work by which the larger clay vessels were held in shape, to be dried in the sun before they were imperfectly burned in the primitive kiln. But the potter also indulged her fancy at times in modelling artistic devices of men and animals, as the handles of the smaller ware, or the forms in which the clay tobacco-pipe was wrought. Nevertheless the Northern continent lingered to the last in its primitive stage of neolithic art; and its most northern were its rudest tribes, until we pass within the Arctic circle, and come in contact with the ingenious handiwork of the Eskimo. Southward beyond the great lakes, and especially within the area of the Mound-Builders, a manifest improvement is noticeable. Alike in their stone carvings and their modelling in clay, the more artistic design and better finish of industrious settled communities are apparent. Still further to the south, the diversified ingenuity of fancy, especially in the pottery, is suggestive of an influence derived from Mexican and Peruvian art. The carved work of some western tribes was also of a higher character. But taking such work at its best, it cannot compare in skill or practical utility, with the industrial arts of Europe's neolithic age. This region has been visited and explored by Europeans for fully three centuries and a half, during a large portion of which time they have been permanent settlers. Its soil has been turned up over areas of such wide extent that the results may be accepted, with little hesitation, as illustrations of the arts and social life subsequent to the occupation of the continent by

its earliest aboriginal races. But we look in vain for evidence of an extinct native civilization. However far back the presence of Man in the new world may be traced, throughout the Northern continent, at least, he seems never to have attained to any higher stage than what is indicated by such evidences of settled occupation as were shown in the palisaded Indian town of Hochelaga; or at most, in the ancient settlements of the Ohio valley. Everywhere the agriculturist only disturbs the graves of the savage hunter. The earthworks of the Mound-Builders, and still more their configuration, are indeed suggestive of a people in a condition analogous to that of the ancient populace of Egypt or Assyria, toiling under the direction of an overruling caste, and working out intellectual conceptions of which they themselves were incapable. Yet, even in their case, this inference finds no confirmation from the contents of their mounds or earthworks. They disclose only implements of bone, flint and stone, with some equally rude copper tools, hammered into shape without the use of fire. Working in the metals appears to have been confined to the southern continent; or, at least, never to have found its way northward of the Mexican plateau. Nothing but the sculptured tobacco-pipe, or the better-fashioned pottery, gives the slightest hint of progress beyond the first infantile stage of the tool-maker.

But whatever may have been the source of special skill among the old agricultural occupants of the Ohio valley, their Iroquois supplanters borrowed from them no artistic aptitude. No remains of its primitive occupants give the slightest hint that the aborigines of Canada, or of the country immediately to the south of the St. Lawrence, derived any knowledge from the old race so curiously skilled in the construction of geometrical earthworks. Any native burial-mounds or embankments are on a small scale, betraying no more than the simplest operations of a people whose tools were mere flint hoes, and horn or wooden picks and shovels. Wherever evidence is found of true working in metals, as distinct from the cold-hammered native copper, as in the iron tomahawk, the copper kettles, and silver crosses, recovered from time to time from Indian graves, their European origin is indisputable. Small silver buckles of native workmanship are indeed common in their graves; for a metallic currency was so unintelligible to them that this was the use to which they most frequently turned French or English silver coinage.

But notwithstanding the general correspondence in arts, habits, and conditions of life, among the forest and prairie tribes of North America, their distinctive classification into diverse dolichocephalic and brachycephalic types points to diversity of origin and a mingling of several races. So far as the native races of Canada are considered, it has been shown that all belong to the dolichocephalic type. The Alligéwi, or Mound-Builders, on the contrary, were a strongly marked brachycephalic race; and the bitter antagonism between the two, which ended in the utter ruin of the latter, may have been originally due to race distinctions such as have frequently been the source of implacable strife.

The short globular head-form, which, in the famous Scioto-mound skull, is shown in a strongly marked typical example with the longitudinal and parietal diameters nearly equal, appears to be common among the southern tribes, such as the Osages, Ottoes, Missouries, Shawnoes, Cherokees, Seminoles, Uchees, Savannahs, Catawbas, Yamasees,

Creeks, and many others. This seems to point to such a convergence, of two distinct ethnical lines of migration from opposite centres, as I think is borne out by much other evidence. In noting this aspect of the question anew, the further significant fact may also be once more repeated, that the Eskimo cranium, along with certain specialties of its own, is preeminently distinctive as the northern type.

Among what may be accepted as typical Canadian skulls, those recovered from the old site of Hochelaga, and from the Huron ossuaries around Lake Simcoe, have a special value. They represent the native race which, under various names, extended from the Lower St. Lawrence westward to Lake St. Clair. The people encountered by Cartier and the first French explorers of 1535, and those whom Champlain found settled around the Georgian Bay sixty-eight years later, appear to have been of the same stock. Such primitive local names, as Stadaconé and Hochelaga, are not Algonkin, but Huron-Iroquois. Native traditions, as well as the allusions of the earliest French writers, confirm this idea of the occupation by a Huron-Iroquois or Wyandot population of the "region northeastward from the mouth of the St. Lawrence, at or somewhere along the Gulf coast, before they ever met with the French, or any European adventurers," as reaffirmed in the narrative of their own native historian, Peter Dooyentate Clarke.[1] But whatever confirmation may be found for this native tradition, it is certain that the European adventurers bore no part in their expulsion from their ancient home. The aborigines, whom Jacques Cartier found a prosperous people, safe in the shelter of their palisaded towns, had all vanished before the return of the French under Champlain; and they were found by him in new settlements, which they had formed far to the westward on Lake Simcoe and the Georgian Bay.

Questions of considerable interest are involved in the consideration of this migration of the Hurons; and the circumstances under which they deserted their earlier home. They were visited by Champlain in 1615, and subsequently by the missionary Fathers, who, in 1639, found them occupying thirty-two palisaded villages, fortified in the same fashion as those described by the first French explorers at Stadaconé and Hochelaga. Their numbers are variously estimated. Brebeuf reckoned them at thirty thousand; and described them as living together in towns sometimes of fifty, sixty, or a hundred dwellings,—that is, of three or four hundred householders,—and diligently cultivating their fields, from which they derived food for the whole year. Whatever higher qualities distinguished the Iroquois from Algonkin or other native races, were fully shared in by the Hurons; and they are even spoken of with a natural partiality by their French allies, like Sagard, as a patrician order of savages, in comparison with those of the Five Nations. When first visited by French explorers, after their protracted journey through the desolate forests between the Ottawa and Lake Huron, their palisaded towns and cultivated fields must have seemed like an oasis in the desert. "To the eye of Champlain," says Mr. Parkman, "accustomed to the desolation he had left behind, it seemed a land of beauty and abundance. There was a broad opening in the forest, fields of maize with pumpkins ripening in the sun, patches of sun-flowers, from the seeds of which the Indians made hair-oil, and in the midst the Huron town of Otouacha. In all essential points it resembled that which Cartier, eighty years before, had seen at Montreal; the same triple

[1] Origin and Traditional History of the Wyandotts, p. 4

palisade of crossed and intersecting trunks, and the same long lodges of bark, each containing many households. Here, within an area of sixty or seventy miles, was the seat of one of the most remarkable savage communities of the continent."[1] The Hurons, thus settled in their latter home, consisted of several "nations," including their kinsmen to the south, as far as Lake Erie and the Niagara river. They had their own tribal divisions, still perpetuated among their descendants. The Rev. Prosper Vincent Sa8atannen, a native Huron, and the first of his race admitted to the priesthood, informs me that the Hurons of Lorette still perpetuate their ancient classification into four "grandes compagnies," each of which has its five tribal divisions or clans, by which of old all intermarriage was regulated. The members of the same clan regarded themselves as brothers and sisters, and so were precluded from marriage with one another. The small number of the whole band at La Jeune Lorette renders the literal enforcement of this rule impossible; but the children are still regarded as belonging to the mother's clan. The five clans into which each of the four companies is divided are:—1. The Deer, *Oskanonton*; 2. The Bear, *Anniolen*; 3. The Wolf, *Annenarisk8a*; 4. The Tortoise, *Andia8ik*; 5. The Beaver, *Tsotai*. There were two, if not more dialects spoken by the old Hurons, or Wyandots; and that of Hochelaga probably varied from any form of the language now surviving. This has to be kept in view, in estimating the value of the lists of words furnished by Jacques Cartier of "le langage des pays et Royaulmes de Hochelaga et Canada, aultrement appellée par nous la nouvelle France."

Of the condition of the region to the west of the Ottawa prior to the seventeenth century nothing is known from direct observation. Before Champlain had an opportunity of visiting it, the whole region westward to Lake Huron had been depopulated and reduced to a desert. The fact that the few natives found by Champlain occupying the once populous region of the Hochelaga Indians were Algonkins, has been the chief ground for the assumption that the expulsion of that old Wyandot stock was due to their hostility. But such an idea is irreconcilable with the fact that the latter, instead of retreating southward to their Huron-Iroquois kinsmen, took refuge among Algonkin tribes. According to the narrative of their own Wyandot historian, Peter Dooyentate, gathered, as he tells us, from traditions that lived in the memory of a few among the older members of his tribe, the island of Montreal was occupied in the sixteenth century by Wyandots or Hurons, and Senecas, sojourning peaceably in separate villages. The tradition is vague which traces the cause of their hostility to the wrath of a Seneca maiden, who had been wronged in the object of her affections, and gave her hand to a young Wyandot warrior on the condition of his slaying the Seneca chief, to whose influence she ascribed the desertion of her former lover. Whatever probability may attach to this romance of the Indian lovers, the tradition that the Hurons were driven from their ancient homes on the St. Lawrence by their Seneca kinsmen is consistent with ascertained facts; as well as with the later history of the Senecas, who are found playing the same part to the Eries under a somewhat similar incentive to revenge, and appear to have taken the lead in the destruction of the Attiwendaronks. The native tradition is of value in so far as it shows that the fatal enmity of the Iroquois to the Hurons was not originally due to the alliance of the latter with the French; but Senecas and Hurons had

[1] Pioneers of France in the New World, p. 267.

alike disappeared, before Champlain visited the scene of Cartier's earlier exploration. The Attiwendaronks, who dwelt to the south of the later home of the Hurons, on the shores of Lakes Ontario and Erie, may have formed another of the nations of the Wyandot stock expelled from the valley of the St. Lawrence. Situated as they were in their later home, midway between the Hurons and Iroquois, they strove in vain to maintain a friendly neutrality. Charlevoix assigns the year 1635 as the date of their destruction by the latter. Certain it is that between that date and the middle of the century their towns were utterly destroyed; and such of the survivors as lingered in the vicinity were incorporated into the nation of the Senecas, who lay nearest to them.

The Eries were another Huron-Iroquois nation, who appear to have persistently held aloof from the league. They were seemingly a fiercer and more warlike people than the Attiwendaronks; they fought with poisoned arrows, and were esteemed or dreaded as warriors. Their numbers must have been considerable, since they were an object of apprehension to the nations of the league, whose western frontiers marched with their own. They are affirmed by the native historian, Cusick, to have sprung from the Senecas; but, if so, their separation was probably of remote date, as they were both numerous and powerful. The country which they occupied was noted among the French *coureurs des bois* for its lynx furs; and they gave accordingly to its people the name of "La Nation du Chat." Their ancient home is still indicated in the name of the great lake beside which they dwelt. But, for some unknown reason they refused all alliance with the Senecas and the league of their Iroquois kin, and perished by their violence within seven years after the Huron country was laid waste. "To the Eries, and to the Neuter nation," or Attiwendaronks, says Schoolcraft, "according to tradition, the Iroquois offered the alternative of admission into the league, or extermination; and the strangeness of this proposition will disappear, when it is remembered that an Indian nation regards itself as at war with all others not in actual alliance."[1] Peace, he adds, was the ultimate aim of the founders of the Iroquois oligarchy; and, for lovers of peace on such terms of supremacy, the *casus belli* would not be more difficult to find than it has proved to be among the most Christian of kings. In the case of the Eries, as of the elder Wyandots of Hochelaga, the final rupture is ascribed to a woman's implacable wrath.

Father Le Moyne, while on a mission to the Onondagas in 1654, learned that the Iroquois confederacy were excited to fury against the Eries. A captive Onondaga chief is said to have been burnt at the stake after he had been offered, according to Indian custom, to one of the Erie women, to take the place of her brother who had been murdered while on a visit to the Senecas. It is a characteristic illustration of how the feuds of ages were perpetuated. The traditions of the Iroquois preserved little more than the fact that the Eries had perished by their fury. But a story told to Mr. Parkman by a Cayuga Indian, only too aptly illustrates the hideous ferocity of their assailants. It represented that the night after the great battle in which the Eries suffered their final defeat, the forest was lighted up with more than a thousand fires, at each of which an Erie was being tortured at the stake.[2] The number is probably exaggerated. But it is only thus, as it were in the lurid glare of its torturing fires, that we catch a glimpse of

[1] League of the Iroquois, p. 56.
[2] The Jesuits in N. America, p. 111, Note.

this old nation as it vanished from the scene. Of the survivors, the greater number were adopted, according to Indian fashion, into the Seneca nation.

Some of the earthworks met with to the south of Lake Erie show proofs of greater constructive labour than anything found in Canada. Still more interesting are the primitive hieroglyphics of an inscription on Cunningham's Island, ascribed to the Eries, and which Schoolcraft describes as by far the most elaborate work of its class hitherto found on the continent.[1] But the rock inscription, though highly interesting as an example of native symbolism and pictographic writing, throws no light on the history of its carvers; and of their language no memorial is recoverable, for they had ceased to exist before the great lake which perpetuates their name was known to the French.

More accurate information has been preserved in reference to the Hurons, among whom the Jesuit Fathers laboured with self-denying zeal, from time to time reporting the results in their "Relations" to the Provincial of the Order at Paris. One of the most characteristic religious ceremonies of the Hurons was the great "Feast of the Dead," celebrated apparently at intervals of twelve years, when the remains of their dead were gathered from scaffolded biers, or remote graves, and deposited amid general mourning in the great cemetery of the tribe. Valuable robes and furs, pottery, copper kettles and others of their choicest possessions, including the pyrulæ, or large tropical shells brought from the Gulf of Mexico, with wampum, prized implements, and personal ornaments, were all thrown into the great trench, which was then solemnly covered over. By the exploration of those Huron ossuaries, the sites of the palisaded villages of the Hurons of the seventeenth century have been identified in recent years; and there are now preserved in the Laval University at Quebec upwards of eighty skulls recovered from cemeteries at St. Ignace, St. Joachin, Ste. Marie, St. Michael, and other villages, the scenes of self-denying labour, and in some cases of the cruel torturings, of the French missionaries by whom they were thus designated. Other examples of skulls from the same ossuaries, I may add, are now in the museums of the University of Toronto, the London Anthropological Society, and the Jardin des Plantes at Paris. The skulls recovered from those ossuaries have a special value from the fact that the last survivors were driven out of the country by their Iroquois foes in 1649; and hence the crania recovered from them may be relied upon as fairly illustrating the physical characteristics of the race before they had been affected by intercourse with Europeans. The Huron skull is of a well defined dolichocephalic type, with, in many cases, an unusual prominence of the occipital region; the parietal bones meet more or less at an angle at the sagittal suture; the forehead is flat and receding; the superciliary ridges in the male skulls are strongly developed; the malar bones are broad and flat, and the profile is orthognathic. Careful measurements of thirty-nine male skulls yield a mean longitudinal diameter of 7.39 to a parietal diameter of 5.50; and of eighteen female skulls, a longitudinal diameter of 7.07 to a parietal diameter of 5.22.[2]

Who were the people found by Cartier in 1535, seemingly long settled and prosperous, occupying the fortified towns of Stadaconé and Hochelaga, and lower points on the St. Lawrence? The question is not without a special interest to Canadians. According to

[1] History of the Indian Tribes, vol. ii, p. 78.

[2] "Huron Race and Head-form," *Canadian Journal*, N.S., vol. xiii., p. 113.

the native Wyandot historian, they were Wyandots or Hurons, and Senecas. That they were Huron-Iroquois, at any rate, and not Algonkins, is readily determined. We owe to Cartier two brief vocabularies of their language, which, though obscured probably in their original transcription, and corrupted by false transliterations in their transference to the press, leave no doubt that the people spoke a Huron-Iroquois dialect. To which of the divisions it belonged is not so obvious. The languages, in the various dialects, differ only slightly in most of the words which Cartier gives. Sometimes they agree with Huron, and sometimes with Iroquois equivalents. The name of Hochelaga, "at the beaver-dam," is Huron, and the agreement as a whole preponderates in favor of a Huron rather than an Iroquois dialect. But there was probably less difference between the two then, than at the more recent dates of their comparison. In dealing with this important branch of philological evidence, I owe to the kindness of my friend, Mr. Horatio Hale, a comparative analysis of the vocabulary supplied by Cartier, embodying the results of long and careful study. He has familiarized himself with the Huron language by personal intercourse with members of the little band of civilized Wyandots, settled on their reserve at Anderdon, in Western Ontario. The language thus preserved by them, after long separation from other members of the widely scattered race, probably presents the nearest approximation to the original forms of the native tongue, as spoken on the Island of Montreal and the lower St. Lawrence. In the following comparative table the Wyandot equivalents to the words furnished in Cartier's lists are placed along side of them, so as to admit of easy comparison. The resemblances which are discernible to the experienced philologist may not strike the general reader with the like force of conviction. Allowance has to be made for varieties of dialect among the old occupants of the lower valley of the St. Lawrence, and also for the changes wrought on the Huron language in the lapse of three and a half centuries, not simply by time, but also as the result of intercourse and intermixture with other peoples. The habit of recruiting their numbers by the adoption of prisoners and broken tribes could not fail to exercise some influence on the common tongue. The *k* or hard *g* of Cartier is, in the Wyandot, frequently softened to a *y*; and on the other hand, the *n* is strengthened by a *d* sound, as in Cartier's pregnant term *Canada*, the old Hochelaga word for a town, which has become in the Wyandot *Yandata*; and so in other instances. When the spelling of Cartier's words varies in different places or editions of his narrative, the various forms are here given. In writing the Wyandot words the consonants are used with their English sounds, except that the *j* is to be pronounced as in French (English *z* in "azure"), and ñ has the sound of the French nasal *n*. The vowels have the same sounds as in Italian and German.

Some of the Wyandot words placed in the following lists alongside of those furnished by Cartier are not, as will be seen, transformations of the old forms, but synonyms, or equivalents now in use. Others, however, show the changes which have taken place, under the novel circumstances which have affected the scattered Huron fugitives in the interval of upwards of three centuries. This is particularly noticeable in the numerals, where the greater number of the modern words are imperfect abbreviations of the original forms. This process of phonetic change and decay is more fully illustrated in subsequent tables of Huron-Iroquois numerals

A COMPARATIVE VOCABULARY OF WORDS IN THE "LANGUAGE OF HOCHELAGA AND CANADA," AS GIVEN BY CARTIER, AND THE CORRESPONDING WORDS IN THE LANGUAGE OF THE WYANDOT (OR WENDAT) INDIANS RESIDING ON THE RESERVE IN THE TOWNSHIP OF ANDERDON, NEAR AMHERSTBURG, ONTARIO: BY MR. HORATIO HALE.

	CARTIER.	WYANDOT.
One	segada, secata	skāt.
Two	tigneny, tignem	tendi.
Three	asche, hasche	sheñk.
Four	honnacon, honnaceon	dāk, or ndak.
Five	ouiscen	wish.
Six	indahir, indaie	wajā, or wayā.
Seven	ayaga, aiaga	tsutaré.
Eight	addegue, adigue	ateré.
Nine	madellon	entroñ.
Ten	assem	ahséñ, or asāñ.
Twenty		tenditawāhseñ.
Thirty		shenkiwāhseñ.
One hundred		skatamendjawe.
One thousand		sañgwāt.
Head	aggourzy, aggoursy, agonaze, aggonzi.	ayeskutañ (my h.)
Forehead	hetguenyascon	yeyeñtsa (my f.)
Eyes	hegata, heigata, igata	yahkweñda.
Ears	ahontascon	yehoñta, yaoñta (my e.)
Mouth	escahe	yeskāreut (my m.)
Teeth	esgougay	yeskoñshya (my t.)
Tongue	osuache, esuache.	yendashya (my t.)
Face	hogouascon	yeyoñshya, yeyoñske (my f.)
Hair	aganiscon, agoniscon	ayerushia (my h.)
Arm	aiayascon	yeya'sya, hajasha.
Belly	eschehenda	yesemeñta (my b.)
Leg	agouguenehonde	yenoñta (my l.)
Foot	onchidascen, ochedasco	yashita (my f.)
Hand	aignoascon, agnascon	yorasā.
Fingers	agenoga	yegyāyi, hañgiā.
Nails	agedascon	ē'ta, yeēhta (my n.)
Man	aguehan	rume (*homo*), hagyāhañ (*vir.*)
Woman	agrueste, agruette.	utehkye, utéhkieñ.
Boy	addegesta	meñtseñtia.
Girl	agnyaquesta	yawitsinoha.
Infant	exiasta	shiāha.
Shoes	atha, atta	rashyu.
Corn	osizy	oneñha.
Water	ame	tsañdusti, or tskadusti.
Flesh	quahouascon	owāhtra.
Fish	queion	yeñtsoñ.
Squirrel	caiognem	huhtayi.
Snake	undeguezy (*couleuvre*)	tyugentsi (snake).
Wood	conda	utahta (wood), yaroñta (tree).
Leaf	hoga, honga	undrahta.

A COMPARATIVE VOCABULARY OF WORDS, ETC.—*Continued.*

	CARTIER.	WYANDOT.
Knife	agoheda	waneñshra.
Hatchet	addogne, asogne	tuyé.
Bow	ahena ahenea	enda.
Arrow	quahetam	o'ondā.
Deer	aionnesta (stag), asquenondo (doe)	skanoñtoñ (deer).
Hare	sourhanda	tañyoñyaha.
Dog	agayo	yañyenō'.
To-morrow	achide	ashitak.
Heaven	quenhia	yaroñya.
Earth	damga	ondēt (earth), omeñtsa (world).
Sun	ysnay	yandishra.
Moon	assonaha	wasuñteyi-yandishra (night-sun.)
Stars	signehoham	tishyoñ.
Wind	cahoha, cahena, cahona	yaora, jukwas.
Sea	agogasy, agougasy	uñtare, tarijñye.
Island	cobena	yawenda.
Mountain	ogacha	ononta, onontija.
Ice	honnesca	udishra.
Snow	canisa	diñyeñta, diñyehta.
Cold	cathau	ture.
Warm	odazan, odayan	tarihaati.
Fire	azista, asista	tsista, tshista.
House	canocha	yanoñsha.
Town	canada	yandāta.
My father	addathy	haista, haistañ.
My mother	adanahoe, adhanaoe	anēañ, anā'eñ.
My brother	addagnin	he'yēañ.
My sister	adhoassene, addasene	eyē'añ.
Beard	sotone	uskwañrañ.
To sing	thegehoaca	tewariwākwe.
To laugh	cahezem	kyeskwatandi.
To dance	thegoaca	yendrawa.
My friend	agniase	nyāterō (friend).
Run	thodoathady	yetake, tiarahtat.
Chief	agouhana	hayuwāneñs.
Night	cuhena	wasuñteye.
Day	adeyahon	meteye, mentahāoñ.
Pine tree	annedda	handehta.

When Champlain followed Cartier into the St. Lawrence after an interval of sixty-eight years, the well-fortified towns had disappeared, along with their builders, and the few occupants of ephemeral birch-bark wigwams belonged to another race. Had he been curious to learn the facts of an event, then so recent, there could have been no difficulty in recovering the history of the exodus of the Hochelagans. But it had no interest for the French adventurers of that day; and the idea most generally favoured by recent writers ascribes

the expulsion of the Wyandots, or Hurons, from their ancient home in eastern Canada, to the Algonkins. This, as already shown, is irreconcilable with the fact that Champlain found them, in the beginning of the seventeenth century, in friendly alliance with the latter against their common foe, the Iroquois. If, however, the Wyandot tradition of the expulsion of the Hurons from the island of Montreal by the Senecas be accepted as an historical fact, it is in no degree inconsistent with the circumstances subsequently reported by Champlain; but rather serves to account for some of them, if it is assumed that the Senecas were, in their turn, driven out by the Algonkins, and then finally withdrew beyond the St. Lawrence.

But there is another kind of evidence bearing on the question of the affinities of the people first met with by Cartier in 1535, which also has its value here. I have carefully compared the skulls found on the ancient site of Hochelaga, and now preserved in the Museum of McGill University, with some of the most characteristic Huron skulls in Laval University, and find that the two correspond closely. Again, the description of the palisaded towns of the Hurons on the Georgian Bay very accurately reproduces that which Cartier gives of Hochelaga. Ephemeral as such fortifications necessarily were, the construction of a rampart formed of a triple row of trunks of trees, surmounted with galleries, from whence to hurl stones and other missiles on their assailants, was a formidable undertaking for builders provided with no better tools than stone hatchets; and with no other means of transport than their united labour supplied. But the design had the advantage of furnishing a self-supporting wall, and so of saving the greater labour of digging a trench, with such inadequate tools, in soil penetrated everywhere with the roots of forest trees. It was the Huron-Iroquois system of military engineering, in which they contrasted favorably with the Algonkins, among whom the absence of such evidence of settled habits as those secure defences supplied, was characteristic of these ruder nomads. But such urban fortifications no less strikingly contrast with the elaborate and enduring military earthworks to the south of the great lakes. The pottery and implements found on the site of Hochelaga are also of the same character as many examples recovered from the Huron ossuaries. On the other hand the peculiar rites, of which those ossuaries are the enduring memorials, appear to have distinguished the western Hurons from the older settlers on the St. Lawrence. The great Feast of the Dead, with its recurrent solemnities, when after the lapse of years the remains of their dead were exhumed, or removed from their scaffold biers, was the most characteristic religious ceremonial of the Hurons; and was practised with still more revolting rites by the kindred Attiwendaronks. Festering dead bodies were kept in their dwellings, preparatory to scraping the flesh from their bones; and the decaying remains of recently buried corpses were exhumed for reinterment in the great trench, which was prepared with enormous labour, and furnished with the most lavish expenditure of their prized furs, wampum, and other possessions.

In all ages and states of society unavailing sorrow has tempted the survivors to extravagant excesses in the effort to do honour to the loved dead; and sumptuary laws have been repeatedly enacted to restrain such demonstrations within reasonable bounds. "The Book of Rites" suffices to show that the Iroquois had, in ancient times, funeral rites, no doubt of the same revolting and wasteful character, until their mythic reformer, Hiawatha, superseded them with a simpler symbolical funeral service. "I have spoken of the solemn event

which has befallen you," are the introductory words to the thirteenth paragraph of "the Condoling Council," and it thus proceeds: "Every day you are losing your great men. They are being borne into the earth; also the warriors, and also your women, and also your grandchildren; so that in the midst of blood you are sitting." It is therefore enacted, in the twenty-seventh paragraph, evidently in lieu of older practices: "This shall be done. We will suspend a pouch upon a pole, and will place in it some mourning wampum, some short strings, to be taken to the place where the loss was suffered. The bearer will enter, and will stand by the hearth, and will speak a few words to comfort those who will be mourning; and then they will be comforted, and will conform to the great law."

A string of black wampum sent round the settlement, is still, among the Indians of the Six Nations, the notice of the death of a chief; as a belt of black wampum was a declaration of war. It seems to me not improbable that the people of Stadaconé and Hochelaga had submitted to the wise social and religious reforms by which the ancient rites of their dead were superseded by the symbolism of the mourning wampum; and hence the absence of ossuaries throughout the island of Montreal, and the whole region to the east. But when the fugitive Wyandots fled into the wilderness, and reared new homes around Lake Simcoe and in the western peninsula, they may have revived traditional usages of their fathers, and resumed the revolting rites which had been reluctantly abandoned. Among the civilized Indians of the Six Nations, some memorials of ancient rites of the dead still survive. A visitor to the reserve at the time of the death of the late highly esteemed chief, George Johnson, told me that on the event being known it was immediately responded to by all within hearing by the prolonged utterance, in a mournful tone, of the cry *Kwé*, and this, passing from station to station soon spread the news of their loss throughout the reserve. Nearly the same sound, uttered in a quicker note, *Qwaig!* is the friendly salutation among the Hurons of Lorette.

The Huron ossuaries do unquestionably constitute a distinctive diversity from ancient Hochelagan customs. Nevertheless, while the evidence appears, on the whole, to justify the assumption that the Five Nations were a distinct people from the Wyandots to the north of the St. Lawrence, before the arrival of Cartier; it seems most probable that the same Iroquois, who at a later date pursued the Hurons with such relentless fury, were the devastators of the region westward to the head of Lake Ontario, which Champlain found a desert.

The later history of the Hurons and Iroquois is not without its special interest. One little band, the Hurons of Lorette, the representatives of the refugees from the massacre of 1648, has lingered till our own day, in too close proximity to the French *habitants* of Quebec to preserve in purity the blood of the old race. But great as are the alterations which time and intermixture with the white race have effected, they still retain many intellectual as well as physical traits of their original stock, after an interval of two hundred and thirty-six years, during which, intimate intercourse, and latterly frequent intermarriage with those of European blood, have wrought inevitable change on the race.[1] Other more vigorous representatives of the old Huron stock occupy a small reservation in the Township of Anderdon, in Western Ontario; and from them the vocabulary

[1] "Some American Illustrations of the Evolution of new Varieties of Man." *Journal of Anthropology*. May, 1870.

has been derived which is employed above as a test of the language of the Hochelagans in the sixteenth century. But the Hurons of Lorette have also preserved their native tongue; and even specimens—if not indeed an ample vocabulary,[1]—of the older form of their language survive, from which some illustrations are adduced below. A third modification of the ancient tongue no doubt exists; for the larger remnant of the survivors of the Hurons, after repeated wanderings, is now settled, far from the native home of the race, on reserves conceded to them by the American Government in Kansas.

The Hurons have thus, for the most part, disappeared from Canada; but it is not without interest to note that the revolution which, upwards of a century ago, severed the connection of the old colonies to the south of the St. Lawrence with the region to the north, restored to Canada its ancient Iroquois race. The confederation of the Five Nations is traced by Mr. Hale, in his "Iroquois Book of Rights," to Hiawatha, whom he reclaims from Longfellow's traditional association with the Ojibways of Lake Superior, and literally identifies as an Onondaga chief of rare sagacity, the beneficent reformer of his people. In Longfellow's version of the "Indian Edda," he refers to it as founded on a tradition prevalent among the North American Indians, of a person of miraculous birth, who was sent among them to clear their rivers, forests, and fishing grounds, and to teach them the arts of peace. That the legend of "a Prince of Peace" in any form should have been perpetuated among tribes persistently devoted to war as the main business of life, can only be accounted for by a growing sense of the misery brought on themselves by hereditary feuds which wasted their numbers, and exposed their families to treacherous massacre, or to the most barbarous tortures. But the Hiawatha tradition appears to belong to the Iroquois, among whom there arose a wise teacher to whom Mr. Hale ascribes the avowed design of a universal federation of his race, under which peace should everywhere reign. "Such," says this latest historian of their league, "is the positive testimony of the Iroquois themselves, and their statement is supported by historical evidence."[2]

No interpreter of Indian philology or tradition is more deserving of respectful consideration than Mr. Hale, whose valuable researches have thrown a flood of light on this department of study. But in view of all that we know of this people throughout the whole authentic period of their history, I find it difficult to reconcile the idea of such a far-sighted philanthropic reformer with the social condition of the tribes known to have composed the Iroquois confederacy. Nevertheless the league of the Iroquois is an undoubted fact. The five tribes or "nations" were thenceforth barded together as members of the famous Kannonsioni or league of the united households. Of its peaceful fruits, except in so far as it prevented internal feuds, we have no evidence; but to its influence apparently was due the exceptional preeminence achieved among the nations of the North American continent by a barbarous people, ignorant of any of the arts indispensable to the merest initial steps in civilization. This race of mere savages acquired the mastery of a region equal in extent to Central Europe; and by a system of warfare, not, after all, more inherently barbarous or recklessly bloody than that of Europe's Grand Monarch, reconstructed the social and political map of the continent east of the

[1] The Huron vocabulary prepared by the Jesuit Father, Chaumonot, is, as I have recently learned, still in existence, and will, I hope, be speedily published, under trustworthy editorial supervision.

[2] The Iroquois Book of Rites, p. 22.

Mississippi. Their influence acquired a novel importance when, in the seemingly insignificant rivalries of French and English fur-traders, they practically determined the balance of power between the two foremost nations of Europe on this continent. Their indomitable pertinacity proved more than a match alike for European diplomacy and military skill; and, as they maintained an uncompromising hostility to the French at a time when the rival colonists were nearly equally balanced, the failure of the magnificent schemes of Louis XIV and his successors, to establish in North America such a supremacy as Charles V and Philip II had held in Mexico and Peru, is largely traceable to them. It is natural that the Anglo-American student of history should estimate highly the polity of savage warriors who thus foiled the schemes of one of the most powerful monarchies of Europe for the mastery of this continent. The late Hon. L. H. Morgan thus writes of them: "They achieved for themselves a more remarkable civil organization, and acquired a higher degree of influence, than any other race of Indian lineage except those of Mexico and Peru. In the drama of European colonization, they stood, for nearly two centuries, with an unshaken front, against the devastations of war, the blighting influence of foreign intercourse, and the still more fatal encroachments of a restless and advancing border population. Under their federal system, the Iroquois flourished in independence, and capable of self-protection, long after the New England and Virginia races had surrendered their jurisdictions, and fallen into the condition of dependent nations; and they now stand forth upon the canvas of Indian history, prominent alike for the wisdom of their civil institutions, their sagacity in the administration of the league, and their courage in its defence."[1] But in this the historian applies to the Iroquois an European standard, similar to that by which Prescott unconsciously magnified Mexican barbarism into a rivalry with the contemporary civilization of Spain. The romance attached to the Hodenosauneega, or Kononsionni, the famous league of the Long House, or United Households, may perhaps, in one sense derive an increased value from the fact that its originators remained to the last mere savages. But it is, at any rate, important to keep the fact in view, and to interpret its significance in that light. When the treaty which initiated the league was entered into by the Caniengas or people of the flint, and the Oneidas, they were both in that primitive stage of unsophisticated barbarism to which the term "stone period" has been applied. In the absence of all knowledge of metallurgy, their implements and weapons were, alike, simple and rude. Agriculture, under such conditions, must have been equally primitive; and as for their wars, when they were not defensive, they appear to have had no higher aim than revenge. Gallatin, no unappreciative witness, says of them: "The history of the Five Nations is calculated to give a favourable opinion of the intelligence of the Red Man. But they may be ranked among the worst of conquerors. They conquered only in order to destroy; and, it would seem, solely for the purpose of gratifying their thirst for blood. Towards the south and the west they made a perfect desert of the whole country within five hundred miles of their seats. A much greater number of those Indians, who since the commencement of the seventeenth century, have perished by the sword in Canada and the United States, have been destroyed by that single nation, than in all their wars with the Europeans."[2]

[1] The League of the Iroquois, p. 2.
[2] Archæologia Americana, vol. ii, p. 79.

To characterize the combination effected among such savage tribes, as one presenting elements of wise civil institutions; or indeed to introduce such terms as league and federal system, in the sense in which they have been repeatedly employed by historians of the Iroquois, as though they referred to a confederation akin to those of the ancient Achæans or Ætolians, is to suggest associations altogether misleading. Though an interesting phase of American savage life, to which its long duration gives additional significance, the Iroquois league was by no means unique. The Creek confederacy embraced numerous tribes between the Mobile, Alabama, and Savannah rivers, and the Gulf of Mexico. At the head of it were the Muskhogees, a numerous and powerful, but wholly savage, race of hunters. Like the Oneidas, Onandagas, and the still older Wyandots, they and the Choctaws claimed to be autochthones. The Muskhogees appealed to a tradition of their ancestors that they issued from a cave near the Alabama River; while the Choctaws pointed to the frontier region between them and the Chicasaws, where, as they affirmed, they suddenly emerged from a hole in the earth, a numerous and mighty people. The system of government amongst the members of this southern confederacy seems to have borne considerable resemblance to that of the Iroquois. Every village was the centre of an independent tribe or nation, with its own chief; and the restraints imposed on the individual members, except when cooperating in some special enterprise or religious ceremonial, appear to have been slight.

An ingenious philological induction of Mr. Hale has already been referred to. He finds in the language of the Cherokees a grammar mainly Huron-Iroquois, and a vocabulary largely recruited from some foreign source. From this he is led to infer that one portion of the conquered Alligéwi, while the conflict still lasted, may have cast in their lot with the conquering race, just as the Tlascalans did with the Spaniards in their war against the Aztecs, and hence the origin of the great Cherokee nation. The fugitive Alligéwi, he surmises, may have fled down the Mississippi till they reached the country of the Choctaws, themselves a mound-building people; and to the alliance of the two he would thus trace the difference in the language of the latter from that of their eastern kindred, the Creeks or Muskhogees.[1] On the assumption of such a combination of ethnical elements, the origin of the Creek confederacy is easily accounted for.

The confederated members of the League of the Iroquois remained savages to the last. Their agriculture, carried on solely by female labour, was simple and rude. Their arts never advanced a step beyond that of Europe's neolithic dawn. Even the implements of war and the chase consisted only of the flint-headed lance and arrow, and the hafted stone for a tomahawk or battle-axe. We have to retrace our way far behind the oldest of Europe's historical traditions for any parallel to such a condition of infantile barbarism. Yet in one respect their progress had been great. Each nation of the Iroquois league had its chief, to whom pertained the right of kindling the symbolic council fire, and of taking the lead in all public assemblies. When the representative chiefs of the nations gathered in the Long House around the Common Council fire of the league, it was no less necessary that they should be able and persuasive speakers than brave warriors. Rhetoric was cultivated in the Council House of the Iroquois no less earnestly than in the Athenian ekklesia or the Roman forum. Acute reasoning and persuasive eloquence demanded all

[1] Indian Migrations, p. 22.

the discriminating refinements of grammar, and the choice of terms which an ample vocabulary supplies. The holophrastic element has been noted as a peculiar characteristic of American languages. The word-sentences thus constructed not only admitted of, but encouraged, an elaborate nicety of discrimination; while the marked tendency of the process, so far as the language itself is concerned, was to absorb all other parts in the verb. Time, place, manner, aim, purpose, degree, and all the other modifications of language are combined polysynthetically with the root. Nouns are to a large extent verbal forms; and not only nouns and adjectives, but adverbs and prepositions, are regularly conjugated. Elaborated polysyllables, flexibly modified by systematic internal changes, give expression, in one compounded word-sentence, to every varying phase of intricate reasoning or emotion; and the complex structure shows the growth of a language in habitual use for higher purposes than the mere daily wants of life. The vocabulary in use in some rural districts in England has been found to include less than three hundred words; and in provincial dialects, thus restricted, the refinements of grammatical expression disappear. Among such rustic communities speech plays a very subordinate part in the business of life. But upon the deliberations of the Indian Council House depended the whole action of the confederacy. Hence, while in all else the Iroquois remained an untutored savage, his language is a marvellously systematized and beautiful structure, well adapted to the requirements of intricate reasoning and persuasive subtlety.

Professor Whitney says, in reference to American languages generally, what may more especially be applied to the Huron-Iroquois: "There are infinite possibilities of expressiveness in such a structure; and it would only need that some native-American Greek race should arise, to fill it full of thought and fancy, and put it to the uses of a noble literature, and it would be rightly admired as rich and flexible, perhaps, beyond anything else that the world knew."[1] Yet, on the other hand, the Iroquois dispense with the whole labials, never articulate with their lips, and throw entirely aside from their alphabetical series of phonetics six of those most constantly in use by us.

In this direction, then, lies the ethnological problem which cannot fail to awaken ever increasing interest; and to which I am anxious to direct, in some special degree, the energies of this section of the Royal Society of Canada. To the native languages we must look for a true key to the solution of some of the most curious and difficult questions involved in the peopling of this continent. "There lies before us," says Professor Whitney, "a vast and complicated problem in the American races; and it is their language that must do by far the greatest part of the work in solving it."

Of the languages of the Huron-Iroquois, the Huron appears to be the oldest, if not the parent stock. When this aggressive race had spread, as conquerors, far to the south of the St. Lawrence, the mother nation appears to have held on to the cradle land of the race, where its representatives were found still in possession when the first European explorers entered the St. Lawrence in the sixteenth century. Colonists, of French or English origin, have been in more or less intimate intercourse with them ever since, yet the materials for any satisfactory study of the Huron language, or of a comparison between it and the various Iroquois dialects, are still scanty and very inadequate. The languages of the Five Nations that originally constituted the members of the Iroquois league, are, in the strictest

[1] Life and Growth of Language, p. 261.

sense of the term, dialects. In their council house on the Grand River, the chiefs of the Mohawks, Oneidas, Onandagas, Cayugas, and Senecas, speak each in their own language and need no interpreter. Nevertheless, the differences are considerable; and a Seneca would scarcely find the language of a Mohawk intelligible to him in ordinary conversation. But the separation of the Tuscaroras from the Iroquois on the Mohawk River had been of long duration, and their language differs much more widely from the others.

The Mohawk language was adopted at an early date for communicating with the Indians of the Six Nations. The New England Company, established in 1649, under favour of the Lord Protector, Cromwell, "for the propagation of the Gospel in New England," was revived on the restoration of Charles II, under a royal charter; and with the eminent philosopher, Robert Boyle, as its first governor, vigorous steps were taken for the religious instruction of the Indians. The correspondence of Eliot, "the Apostle of the Indians," with the first governor of the company, is marked by their anxiety for the completion of the Massachusetts Bible, which, along with other books, he had translated for the benefit of the Indians of New England. The silver communion service, still preserved at the reserve on the Grand River, presented to the ancestors of the Mohawk nation, by Queen Anne, is an interesting memorial of the early efforts for their Christianization. It bears the inscription: "A. R., 1711. The gift of Her Majesty, by the grace of God, of Great Britain, France and Ireland, and of her plantations in North America, Queen: to her Indian Chappel of the Mohawks." The date has a special interest in evidence of the transforming influences already at work; for it was not till three years later that the Tuscaroras were received into the confederation, and the Iroquois became known by their later appelation as the Six Nation Indians. In accordance with the efforts indicated by the royal gift, repeated steps were taken for translating the Scriptures and the Prayer Book into their language. In a letter of the Rev. Dr. Stuart, missionary to the Six Nations, dated 1771, he describes his introduction to Captain Brant, at the Mohawk village of Canajoharie, and the aid received from him in revising the Indian Prayer Book, and in translating the Gospel of St. Mark, and the Acts of the Apostles into the Mohawk language. The breaking out of the revolutionary war arrested the printing of these translations. The manuscripts were brought to Canada in 1781, and placed in the hands of Colonel Clause, the Deputy Superintendent of Indian Affairs. This gentleman subsequently carried them to England, where they were at length printed. A more recent edition of the Mohawk Prayer Book, prepared under the direction of the Rev. Abraham Nelles, a missionary of the New England Company, with the aid of a native catechist, issued from the Canadian press in 1842. The Indian text is accompanied with its English equivalent on the opposite page, and this *Kaghyadonhsera ne Yoederennayeadagwha*, or Book of Common Prayer, is still in use in the religious services of the Six Nation Indians at their settlement on the Grand River.

Some characteristics of the language, such as the absence of labials, are illustrated below from the Mohawk Prayer Book. The one specially referred to constitutes not only a distinctive difference from the old Huron speech, but affords proof of the latter being the older form. "It is a fact," says Professor Max Müller, in referring to his intercourse with an intelligent native Mohawk, then a student at Oxford, "that the Mohawks never, either as infants or as grown-up people, articulate with their lips. They have no *p, b, m,*

f, v, w—no labials of any kind."[1] The statement, so far as the Mohawk infants are concerned, is open to further inquiry; but Dr. Oronhyatekha, the Mohawk referred to, and to whom I have been largely indebted in this and other researches in Indian philology, not only rejects the six letters already named, but also *c, g, l, z*. The alphabet is thus reduced to seventeen letters. Professor Max Müller notes in passing, that the name "Mohawk" would seem to prove the use of the labial. But it is of foreign origin, though possibly derived from their own *oegwehokongh*, people. The name employed by themselves is "Canienga." The practice of speaking without ever closing the lips is an acquired habit of later origin than the forms of the parent tongue. A comparison of any of the Iroquois dialects with the Huron as still spoken by the Wyandots of Ontario, shows the *m* in use by the latter in what is no doubt a surviving example of the oldest form of the Huron-Iroquois language. This Huron *m* frequently becomes *w* in the Iroquois dialects, *e. g.*, *skatamendjaweh*, "one hundred," becomes in Mohawk *onskadewennyaweh*; *rume*, "man," Mohawk, *ronkwe*, etc. These and other examples of this interchangeable characteristic of Indian phonology, and the process of substitution in the absence of labials, are illustrated in the table of Huron-Iroquois numerals on a subsequent page. The habit of invariably speaking with the lips open is the source of very curious modifications in the Iroquois vocabularies when compared with that of the Wyandots. The *m* gives place to *w, nw, nh*, or *nhu*; also to *kn* and *nkw*, and so frequently changes the whole character of the word by the modifications it gives rise to.

A comparison of the numerals of cognate languages and dialects is always instructive; and with the growing disposition of American philologists to turn to the Basques, as the only prehistoric race of Europe that has perpetuated the language of an allophylian stock with possible analogies to the native languages of America, I have placed their numerals along side of those of the Huron-Iroquois. The permanency of the names for numerals, and their freedom from displacement by synonyms, are seen in the universality of one series of names throughout the whole ancient and modern Aryan languages of Asia and Europe. But the Basque numerals bear no resemblance to them, unless such be traced in the probably accidental resemblance of the *bi*, two, and the *sei*, "six," as in the *assem*, "ten," (*devem*), of the old Hochelaga, the *ahsen* of the later Wyandots. The *ehun* of the Basque has also its remote, and probably accidental resemblance; but the *milla*, "one thousand," is certainly borrowed, and serves to show that the higher numerals, with the evidence they afford of advancing civilization, were the result of intrusive Aryan influences. With the growing tendency to turn to the prehistoric Iberians of Europe as one possible key to the origin of the races and languages of America, it is well to keep this test in view for comparison with the widely varying native numerals. But the correspondence is slight, even with probable Turanian congeners. One Biscayan form of "three," *hirun*, is not unlike the Magyar *harom*; while the *eyg*, "one," of the latter, seems to find its counterpart in the inseparable particle that transforms the Basque radical *ham*, "ten," into the *hamaika*, "eleven." But such fragmentary traces are in striking contrast to the radical agreement of Sanskrit, Zend, Greek, Latin, Celtic, Slavonic, and Teutonic numerals. Mr. Hale has drawn my attention to the curious manner in which the names of the first five Hochelaga numerals in Cartier's list are contracted and strengthened in the modern

[1] Lectures on the Science of Language, 2nd Ser., p. 162.

Wyandot; and some of the modifications in the Iroquois dialects are no less interesting. *Secata*, the Hochelaga "one," survives in the Onondaga *skadah*, while it becomes *skat* in the modern Huron, the Cayuga, and the Seneca. But in the compounded form of the Wyandot "one hundred," *skatamendjawe*, as in the Onondaga *skadahdewennyachweh*, the terminal *a* reappears. *Tigneny*, the old form of "two," is abridged and strengthened to *tendè; asche*, "three" (originally, in all probability, *aschen*, or, as still in use by the Hurons of Lorette, *achin*,) survives as *ahsunh* or *ahsenh* in nearly all the Iroquois dialects, including the Tuscarora. In the Nottoway it is still discernible in the modified *arsa*. The exceptions are the Seneca, where it becomes *sen*, while one Wyandot form is *shenk*; which reappears in the Seneca compounded form of "thirty," *shenkwashen*. *Honnacon*, "four," loses both its initial and terminal syllables, and becomes *dak* in the Wyandot, and *keih* or *kei*, an abbreviation of the Mohawk *kayerih*, in the Cayuga and the Seneca dialects. The ancient form of "five," *ouiscon*, has partially survived in the Huron *ouisch*. It becomes *wisk*, *whisk*, *wish*, or (in the Seneca) *wis*, in all the Iroquois dialects,—the Wyandot and Cayuga once more agreeing in form. The *ayaga*, "seven," of the old Hochelaga, nearly resembles the *jadah* of several of the Iroquois dialects, asin the Cayuga *jadak*, in the Tuscarora *janah*, and in the Nottoway *oyag*; whereas in the Wyandot it is *tsotare*. The *adigue*, "eight," in its oldest form, is *sadekonh* in the Mohawk, and *dekrunh* in the Cayuga; with the substitution of the *l* for *r* it becomes *deklonh* in the Oneida; and after changing to *tekion* in the Seneca, and *nagronh* in the Tuscarora, it reappears in the Nottoway as *dekra*. The ancient *madellon*, "nine," curiously survives in abridged form, with the substitute for the labial, in the Oneida *wadlonh* and the Onondaga *wadonh*, while one Wyandot form is *entron*, and that of the Hurons of Lorette *entson*. In the Hochelaga *assem*, "ten," we have the old form which is perpetuated in the Wyandot *ahsen*, the Onondaga and Cayuga *wasenh*, the Tuscarora *wasunh*, and the Nottoway *washa*; while the Mohawk and the Oneida have the diverse *oyerih*, or *oyelih*, with the characteristic change of *r* into *l*. The form of the Mohawk for "one thousand," *oyerihnadewunnyaweh*, is an interesting illustration of the progressive development of numbers. *Na* is probably a contraction of *nikonh*, "of them," or "of it,"—the whole reading "of them ten hundred."

In comparing the languages of the different members of the Iroquois confederacy with the Wyandot or Huron, some of the facts already noted in the history of the former have to be kept in view. Nearly two centuries and a half have transpired since the three western nations of the confederacy, the Onondagas, Cayugas and Senecas received great additions to their numbers by the successive adoption of Attiwendaronk, Huron, and Erie captives, while the Canyengas, or Mohawks, and the Oneidas remained unaffected by such intrusions. There is direct evidence that the Onondaga language has undergone great change; as a Jesuit dictionary of the seventeenth century exists, which shows a much nearer resemblance between the Mohawk and Onondaga languages at that date than now appears. Allowance must be made for similar changes affecting the Hurons in their enforced migration from the St. Lawrence to their later homes. Here, as in so many other instances, it becomes interesting to note how the language of a people reflects its history.

In tracing out slighter and more remote resemblances, such as may be discerned on a close scrutiny, where the variation between the Hochelaga and the modern Wyandot

numerals is widest, the different sources of change have to be kept in view. In all such comparisons, moreover, allowance must be made for the phonetic reproduction of unfamiliar words learned solely by ear, as well as for the peculiar representation of the nasal sounds in their reduction to writing by a French or English transcriber.

The tradition, mentioned by Dooyentate Clarke, of Senecas and Wyandots living in friendly contiguity on the Island of Montreal in the sixteenth century, naturally suggests the probability that their dialects did not greatly differ. Certain noticeable resemblances between the Seneca and the Wyandot numerals have been noted above, but it is only their modern forms that are thus open to comparison; and in the process of phonetic decay the Seneca has suffered the greatest change. But after making every allowance for modifications wrought by time, by adoption of strangers into the tribe, and other internal sources of change; as well as for the imperfection of Cartier's renderings of the Hochelaga tongue, and for subsequent errors of transcribers and printers, there still remains satisfactory evidence of relationship between nearly half of Cartier's vocabulary and the corresponding words of the Wyandot tongue. A comparison has already been made between the Hochelaga numerals and those of the Wyandots of Anderdon. In the following comparative tables of numerals, I have placed alongside of the old Hochelaga series derived from Cartier's lists those now in use among the Hurons of Lorette, as supplied to me by M. Paul Picard, the son of the late Huron chief. In the third column another version of the Wyandot numerals is given, from Gallatin's comparative vocabulary. It is derived from different sources, including the United States War Department; and therefore, no doubt, illustrates the changes which the language has undergone among the Wyandots on their remote Texas reserve. Gallatin also gives another version of Huron numerals derived from Sagard. It will be seen that M. Picard used the *t* as in Cartier's lists, and in that of the southern Wyandots, where the *d* is employed in others; except in the Nottoway numerals, where the use of both is, no doubt, due to the English transcriber. In comparing the different lists, the variation in orthography and also the interchangeable *k* and *g* have to be kept in view. Thus the Cayuga has *dekrunh*, in the Oneida *dekelonh*, where the Tuscarora has *nagronh*. But the Huron *tendi*, in use now both at Lorette and Anderdon, shows the result of long intercourse with Europeans begetting an appreciation of their discrimination between the hard and soft consonants. Had the whole series been derived from one source, such orthographic variations would have disappeared. The lists have been furnished to me by the Rev. J. G. Vincent and M. Picard, educated Hurons; L. A. Dorion, an educated Iroquois; Dr. Oronhyatekha, an educated Mohawk; Mr. Horatio Hale; and also from Gallatin's valuable comparative tables of Indian vocabularies, in the "Archæologia Americana." In the Synopsis of the Indian Tribes, to which these vocabularies form an appendix, Gallatin classed both the Tuteloes and the Nottoways, along with the Tuscaroras, as southern Iroquois tribes. Recent researches of Mr. Hale have established the true place of the Tuteloes to be with the Dacotan, and not the Huron-Iroquois family; but it is otherwise with the Cherohakahs, or Nottoways, whose home was in south-eastern Virginia, where their memory is perpetuated in the name of the river on which they dwelt. At the close of the seventeenth century they still numbered one hundred and thirty warriors, or about seven hundred in all; but twenty years later, of the whole tribe only twenty souls survived. At that date two vocabularies of the language were obtained, which furnish satisfactory evidence of the correctness of their

classification among southern Iroquois tribes. Their numerals, as shown in the following tables, approximate, as might be anticipated, to those of the Tuscaroras, at least in the majority of the primary numbers; whereas those of the Tuteloes are totally dissimilar. As to the Basque numerals introduced into the comparative tables, they only suffice to show the diversity of the pre-Aryan language still spoken, in varying dialects, on both slopes of the Pyrenees, from either the Iroquois or any other known American language, except in so far as both are agglutinative in structure. Van Eys, in his "Basque Grammar," draws attention to the words *buluzkorri*, and *larrugori*, "naked"; the first of which literally signifies "red-hair," and the second "red-skin." They are interesting illustrations of the way in which important historical facts lie embedded in ancient languages. But the colour of the hair forbids the inference that the ruddy Basques of primitive centuries were akin to the "Redskins" of the New World.

The phonology of the Iroquois languages is notable in other respects besides those already referred to. According to M. Cuoq, an able philologist, who has laboured for many years as a missionary among the Iroquois of the province of Quebec, the sounds are so simple that he considers an alphabet of twelve letters sufficient for their indication: *a, e, f, h, i, k, n, o, r, s, t, w*. The transliterations noticeable in the various Iroquois dialects, follow a well known phonetic law. Thus the *l* and *r* are interchangeable, as *ronkwe*, "man," in the Mohawk, becomes in the Oneida *lonkwe*; *raxha*, "boy," becomes *laxha*; *rakeniha*, "my father," becomes *lakenih*, etc. The same is seen throughout the compound numerals from "eleven" onward. The Cayuga and Tuscarora most nearly approach to the Mohawk in this use of the *r*. A characteristic change of a different kind is seen in the grammatical value of the initial *r* in the Mohawk in relation to gender. For example, *onkwe* is applied to mankind, as distinguished from *karyoh*, "the brute." It becomes *ronkwe*, man, *yonkwe*, woman. So also *raxah*, "boy," changes to *kaxha*, "girl;" *rihyenah*, "my son," to *kheyenah*, "my daughter," etc. The change of gender is further illustrated in such examples as *raohih*, his apple; *raoyen*, his arrow; *ahkohih*, her apple; *ahkoyen*, her arrow; *raonahih* (masc.), *aonahih* (fem.), their apples; *raodiyenkwireh* (masc.), *aodiyenkwireh* (fem.), their arrows, etc. But this arrangement of the formative element as a prefix is characteristic of American languages, though not peculiar to them. Thus *Seshatsteaghseragwekough*, Almighty God, (literally "Thou who hast all power, or strength,") becomes, in the third person, *Rashatsteaghseragwekough*.

The vowel sounds are very limited. No distinction is apparent in any Huron-Iroquois language between the *o* and the *u*. In writing it the *e* and *u* sounds are also often interchangeable. Where, for example, *e* is used in one set of the Tuscarora numerals supplied to me, another substitutes *u* for it wherever it is followed by an *n*; e. g., *enjih*, *unjih*; *ahsenh*, *ahsunh*; *endah*, *undah*, etc. So also the word for "man" is written for me in one case *onkwe*, and in another *unkweh*. It requires an acute and practised ear to discriminate the niceties of Indian pronunciation, and a no less practised tongue to satisfy the critical native ear. Dr. Oronhyatekha, when pressed to define the value of the *t* sound in his own name, replied, "it is not quite *t* nor *d*." The name is compounded of *oronya*, "blue," the word used in the Prayer Book for "heaven," and *yodakha*, "burning." In very similar terms, Asikinack, an educated Odahwah Indian, when asked by me whether we should say Ottawa, or Odawa, replied that the sound lay between the two,—a nicety discernible only by Indian ears.

COMPARATIVE TABLES OF NUMERALS IN HURON-IROQUOIS AND BASQUE.

	HOCHELAGA. (Cartier.)	HURON. (Lorette.)	WYANDOT.	MOHAWK.
1	segada .. secata ...	skāt.	scat	unska
2	tigneny . tignem .	tendi	tendee	dekenih
3	asche	achin	shaight	ahsunh
4	honnacon	ndak	andaght	kayerih
5	ouiscon	wisch	weeish	wisk
6	indahir	wahia	waushau	yayak
7	ayaga	tsotaré	sootaie	jadah
8	adigue	ateré	autarai	sadekonh
9	madellon	entson	aintru	tyodonh
10	assem	asen	aughsagh	oyerih
11		asenskatiskaré	assan escate escarhet	unskayawenreh
12		asentenditiskaré	asanteni escarhet	dekenihyawenreh
13		āsenachinskaré		ahsunhyawenreh
14		asendakskaré		kayerihyawenreh
15		asenwischskaré		wiskyawenreh
16		asenwahiaskaré		yayakyawenreh
17		asentsotaréskaré		jadahyawenreh
18		asenateréskaré		sadekonhyawenreh
19		asenentsonskaré		tyodonhyawenreh
20		tendi eouasen	tendeitawaughsa	dewasunh
30		achink iouasen		ahsunhniwasunh
100		enniot iouasen	scutemaingarwe	unskadewennyaweh
1000		asenate ouendiaré	assen attenoignauoy	oyerih-nadewennyaweh

COMPARATIVE TABLES OF NUMERALS IN HURON-IROQUOIS AND BASQUE.—*Continued.*

	ONEIDA.	ONONDAGA.	CAYUGA.	SENECA.
1	unska	skadah	skat	skat, skaut
2	deken	dekenih	deknih	dekni, tindee
3	ahsunh	ahsunh	ahsenh	sen, shaight
4	kayeh	kayeih	keih	kei, kaee
5	wisk	wisk	wish	wis, wish
6	yahyak	ahyak	hyeih	yei, yaee
7	jadak	jadah	jadak	djadak, jawdock
8	deklonh	dekenh	dekrunh	dekion, tikkeugh
9	wadlonh	wadonh	dyoton	tiohton, teutough
10	oyelih	wasenh	wasenh	washen, wushagh
11	unskayawenleh	skadahkahe	skatskareh	skatskae
12	dekenyawenlih	dekenihkahe	deknihskareh	dekniskae
13	ahsunhyawenlih	ahsunhkahe	ahsenhskareh	senskae
14	kayehyawenlih	kayeihkahe	keihskareh	keiskae
15	wiskyawenlih	wiskahe	wishkareh	wiskae
16	yahyakyawenlih	ahyakkahe	hyeihskareh	yeiskae
17	jadahyawenlih	jadahkahe	jadakskareh	djadakskae
18	deklonhyawenlih	dekenhkahe	dekrunhskareh	dekionskae
19	wadhyawenlih	wadonhkahe	oyotonskareh	diohtonskae
20	dewasunh	dewasenh	dewasenh	dewashen
30	ahsunhniwasunh	ahsunhniwasenh	dewasenh skatskareh	shenkwashen
100	unskadewenayaweh	skadahdewennyaeheweh	skatdewennyaweh	skattewenyae
1000				washen notewenyae

COMPARATIVE TABLES OF NUMERALS IN HURON-IROQUOIS AND BASQUE.—*Continued.*

	TUSCARORA.	NOTTOWAY.	TUTELO.	BASQUE.
1	unjih	unte	noñs, nosai, nonsa	bat
2	nektih	dekance	nomba, nomp	bi, biga
3	ahsunh	arsa, quaachsa	nani, lani, lat	hirur
4	undah	hentag	tōpa, topai, top	laur
5	wisk	whisk	kasa, kisan, kisahi	bortz
6	oyak	oyag	akāspe, agus	sei
7	janah	ohatag	sagom, sagomink	zaspi
8	nagronh	dekra	palan, palali	zortzi
9	nirunh	deheerunk	tsaen, ksaki	bederatzi
10	wasunh	washa	putskai, putsk	hamar
11	unjihskarah	urteskahr	agenosai	hamaika
12	nektihskarah	dskaneskahr	agenomba	hamabi
13	ahsunhskarah		agelali	hamahirur
14	undahskarah		agetoba	hamalaur
15	wiskskarah		agegisai	hamabortz
16	oyakskarah		agegaspe	hamasei
17	janahskarah		agesagomi	hamazaspi
18	nagronhskarah		agepalali	hamazortzi
19	nirunhskarah		agekisauka	hameretzi
20	newasenh	dewartha unteskahr	putska nomba	hogei
30	undahdiwasenh	arsence warsa	putska nani	hogei eta hamar
100	kayaswih	kaharsthree	okeni	ehun
1000		unteyoasthree	okeni butskai	milla

In relation to number there are both a dual and a plural, but this is limited to the pronouns. The personal pronoun is thus declined :—

FIRST PERSON.

SINGULAR.		DUAL.		PLURAL.	
I	Iih.	*We*	Onkononha.	*We*	Onkyunha.
My	Ahkwawenh.	*Ours*	Onkyawenh.	*Ours*	Onkwawenh.
Me	Iih.				

SECOND PERSON.

Thou	Iseh.	*You*	Senonha.	*You*	Jonha.
Thy	Sawenh.	*Yours*	Jawenh.	*Yours*	Sowawenh.

THIRD PERSON.

He	Raonha.	*They*	Rononha.	*They*	Rononha.
His	Raowenh.	*Theirs*	Raonawenh.	*Theirs*	Raonawenh.

She, or *it*	Aonha.	*They*	Ononha.
Her's, or *its*.	Aowenh.	*Theirs*	Aonawenh.

The pronoun may thus be shown in post-positional relation to the noun :—

I am a Mohawk.	Kanyenkehaka ne Iih	*We are Mohawks.*	Kanyenkehaka ne onkyunha
Thou art a Mohawk.	Kanyenkehaka ne iseh	*You are Mohawks.*	Kanyenkehaka ne johna
He is a Mohawk.	Kanyenkehaka ne raonha	*They are Mohawks.*	Kanyenkehaka ne ononha

The plural of nouns is formed, for the most part, in two ways, according to the relation of the word to animate beings, or to inanimate objects. For the former the termination *okonh* is added to the singular form of the noun. Thus *yakosatens*, "a horse," becomes in the plural *yakosatensokonh*. In *ronkwe*, "man," there are the distinctive plurals *rononkwe*, "men," *onkwehokonh*, "mankind." For inanimate objects the addition becomes *okon*, or *okonah*, as *ahsareh* becomes *ahsarehokon*, or *ahsarehokonah*; *ahdah* becomes *ahdahhokon*, or *ahdahakonah*.

In expressing gender there is a general form used when speaking of the female sex, and employed without distinction, as a common gender, when referring to animals. In speaking of men and women together, the masculine dual or plural form is used. In speaking of women alone the common gender is applied; but there is another distinctive form in the pronoun, employed only when speaking of, or to, one who is an object of respect or affection, such as a mother. This is indicated in the peculiar agglutinative structure of the language by the *ka* or *ke* as a feminine intercalation, thus: *ahkaonha*, she; *ahkowenh*, hers. The change from masculine to feminine in nouns relating to mankind is expressed mainly by the use of the initial *r* or *k*, as in the following examples :—

ronkwe Man.	*raxah* Boy.	*rihyenah* My son.
yonkwe Woman.	*kaxah* Girl.	*kheyenah* My daughter.

The pronoun is amalgamated with the noun, in accordance with the agglutinative process which rules throughout, as in the following example, and in its mode of forming

the possessive case. "My apple," is *ahkwahih*. This is a compound of the pronoun, *ahkwawenh*, "my," and *kahih*, "apple," but instead of *ahkwawenh* + *kahih*, the last syllable of the pronoun, and the first of the noun, are elided. The peculiar forms for expressing the special and common female gender are also shown here in the formation of the second and third persons :—

SINGULAR.

sahih	Thy apple,	from *sawenh* + *kahih*.
raohih	His apple,	" *raowenh* + *kahih*.
ahkohih	Her apple,	" *ahkowenh* + *kahih*.
aohih	Her, or its, apples,	" *aowenh* + *kahih*.

	DUAL.			PLURAL.
	unkyahih	Our apple.		*unkwahih*.
	jahih	Your apple.		*sewahih*.
MASC.	*raonahih*	Their apple.	MASC.	*raonahih*.
FEM. or NEUT.	*aonahih*	Their apple.	FEM. or NEUT.	*aonahih*.

So with *kayenkwireh*, "an arrow," or *ahdokenh*, "a tomahawk;" the possessive case is similarly formed thus :—

ahkwadokenh	My tomahawk,	*ahkwawunh ahdokenh*.
sadokenh	Thy "	from *sawenh* " " "
raodokenh	His "	" *raonwunh* " " "
ahkodokenh	Her "	" *ahkowunh* " " "
aodokenh	Her, or its tomahawk,	from *aowunh ahdokenh*.

The dual and plural are formed throughout as in the first example.

The same peculiar distinctive feminine forms, the one used in addressing a person loved or respected, and the other applied to an inferior or a stranger, affect the combination of the pronoun and verb, as in the following example; which has no claim to present all the minute elaborations of which the Mohawk verb is susceptible, but will in some degree illustrate its flexibility, and the process by which it accomplishes results akin to those effected by the English auxiliary verbs :—

The verb To Give.

INDICATIVE MOOD.

PRESENT PROGRESSIVE TENSE.

1. With Masculine object to verb.

SINGULAR.		PLURAL.	
riyawis	I am giving him.	*shakwawis*	We are giving him.
chtwawis	Thou art giving him.	*chtsiewawis*	You are giving him.
rowis	He, she, or it, is giving him.	*ronwawis*	They (M. and F.) are giving him.

DUAL.

chtsityawis	We two are giving him.
chtsijawis	You two are giving him.
ronwawis	They two are giving him.

2. With Feminine object of love or respect.

SINGULAR.		PLURAL.	
kayawis	I am giving her.	*yakhiyawis*	We are giving her.
sayawis	Thou art giving her.	*yetsiyawis*	You are giving her.
sakowis	He is giving her.	*sakonawis*	They (M.) are giving her.
yakowis	She, or it, is giving her.	*yakonawis*	They (F.) are giving her.

DUAL.

yakhiyawis	We two are giving her.
yetsiyawis	You two are giving her.
sakonawis	They two are giving her.

3. With Feminine or Neuter Object.

kawis	I am giving her, or it.	*yakwawis*	We are giving her, or it.
sawis	Thou art giving her, or it.	*sewawis*	You are giving her, or it.
rawis	He is giving her, or it.	*sakonawis*	They (M.) are giving her, or it.
yowis	She is giving her, or it.	*yakonawis*	They (F.) are giving her, or it.

There is no change in the dual to distinguish between "giving him" or "her," and "giving them."

PAST INDEFINITE.

1. With Masculine Object.

riyawih	I gave him.
ehtsawih	Thou gavest him.
rowih	He, or she, gave him, or her.

2. With Fem. Object.

keyawih	I gave her.
sheyawih	Thou gavest her.
shakowih	He gave her.
yakowih	She, or it, gave her.

3. With Fem. or Neut. Object.

kawih	I gave her, or it.
sawih	Thou gavest her, or it.
rawih	He, or she, gave her, or it.
yowih	He, or she, gave her, or it.

PRESENT PERFECT TENSE.

nenhkeyawih[1]	I have given him, or her.
nensheyawih	Thou hast given him, or her.
nenhshakowih	He has given him, or her.
nenhyakowih	She, or it, has given him, or her.

PAST PERFECT TENSE.

1. With Mas. Object.

nenhsihiyawih	I had given him.
nenhsitsawih	Thou hadst given him.
nenhsihowih	He had given him.
nenhsishakwawih	We had given him.
nenhsistsisewawih	You had given him.
nenhsihonwawih	They had given him.

2. With Fem. Object.

nenhsikeyawih	I had given her.
nenhsisheyawih	Thou hadst given her.
nenhsishakowih	He had given her.
nenhsiyakowih	She had given her.
nenhsiyakhiyawih	We had given her.
nenhsiyetsiyawih	You had given her.
nenhsishakonawih	They (M.) had given her.
nenhsiyakonawih	They (F.) had given her.

3. With Fem. or Neut. Object.

nenhsikawih	I had given her.
nenhsisawih	Thou hadst given her.
nenhsihawih	He had given her.
nenhsiyowih	She had given her.
nenhsiyakwawih	We had given her, or it.
nenhsisewawih	You had given her, or it.
nenhsikonwawih	They had given her, or it.

4. With Plur. Object.

nenhsikeyawih	I had given them.
nenhsisheyawih	Thou hadst given them.
nenhsishakowih	He had given them.
nenhsiyakowih	She had given them.

[1] The prefix, *nenh*, is here, and in the following tense, a contraction for *ohnenh*, already.

FUTURE SIMPLE TENSE.

1. With Mas. Object.		2. With Fem. Object.	
wihiyonh	I will give him.	*wakeyonh*	I will give her.
wutshonh	Thou wilt give him.	*unseyonh*	Thou wilt give her.
wuhaonh	He will give him.	*wusakaonh*	He will give her.
unsakwayonh, or contr.		*unyakaonh*	She will give her.
unsakyonh	We will give him.	*unyakhiyonh*	We will give her.
untsiswayonh, or		*wuyetsiyonh*	You will give her.
untsijonh	You will give him.	*unshakononh*	They (M.) will give her.
unhonwayonh, (no contr.)	They will give him.	*unyakononh*	They (F.) will give her.

3. With Fem. or Neut. Object.

wakonh	I will give her, or it.
unsonh	Thou wilt give her, or it.
unronh	He will give her, or it.
unyaonh	She will give her, or it.
unyakyonh	We will give her, or it.
unjonh	You will give her, or it.
unkwayonh	They will give her, or it.

FUTURE PERFECT TENSE.

1. With Mas. Object.		2. With Fem. Object.	
nenhsunhiyawih	I shall have given him.	*nenhsunkeyawih*	I shall have given her.
nenhsuntsawih	Thou shalt have given him.	*nenhsusheyawih*	Thou shalt have given her.
nensunhowih	He, or she, shall have given him.	*nenhsushakowih*	He shall have given her.
nenhsushakwawih	We shall have given him.	*nenhsunyakowih*	She shall have given her.
nenhsustsiswawih	You shall have given him.	*nenhsunyakhiyawih*	We shall have given her.
nenhsunhonwawih	They shall have given him.	*nenhsunyetsiyawih*	You shall have given her.
		nenhsushakonawih	They (M.) shall have given her.
		nenhsunyakonawih	They (F.) shall have given her.

3. With Fem. or Neut. Object.

nenhsunkawih	I shall have given her, or it.
nenhsunkawih	Thou shalt have given her, or it.
nenhsunhawih	He shall have given her, or it.
nenhsunyowih	She shall have given her, or it.
nenhsunyakwawih	We shall have given her, or it.
nenhsunsawawih	You shall have given her, or it.
nenhsunkunwawih	They shall have given her, or it.

IMPERATIVE MOOD.

chtshonh	Do thou give him.
shcyonh	Do thou give her.
chtsijonh	Do ye give him.
yetsiyonh	Do ye give her.
takwayonh, or contr. *takyonh*	Do you give me.
takenonh	(S. or p.) give us two.
takeniyonh	Do you two give me.

Similarly also the verb, To Drive, is similarly conjugated, as shown here in the following tense :—

PRESENT PROGRESSIVE.

1. With Masc. Object.

riyadoris	I am driving him.	*shakadoris*	We are driving him.
chtshadoris	Thou art driving him.	*chtsiswadoris*	You are driving him.
rodoris	He, or she, is driving him.	*ronwadoris*	They are driving him.

2. With Plur. Object.

kadoris	I am driving them.	*yodoris*	She is driving them.
sadoris	Thou art driving them.	*yakhiyadoris*	We are driving them, etc., [*same as verb*, To Give.]
radoris	He is driving them.		

3. With Fem. or Neut. Object.

keyadoris	I am driving her, or it.
seyadoris	Thou art driving her, or it.
s'hakodoris	He is driving her, or it.
yakodoris	She is driving her, or it.

The verb, To Hunt, simply changes the terminal *ris* of the last verb into *rats*. *Keyadorats*, "I am hunting her," or "it," etc. The verb, To Lend, changes it into *has*. *Kennihas*, "I am lending her." It will be observed that the Feminine singular is like the plural, e.g., *keyawis*, "I am giving her," or "them;" *keyadoris*, "I am driving her," or "them."

kennihas	I am lending her.	*kenihas*	I am lending her, or it.
shennihas	Thou art lending her.	*senihas*	Thou art lending her, or it.
shakonihas	He is lending her.	*ronihas*	He is lending her, or it.
yakonihas	She is lending her.	*yonihas*	She is lending her, or it.

The examples adduced may suffice to illustrate the elaborate yet consistent symmetry of the verb, compounded out of the significant roots of its various verbal and grammatical members. Prefixes, suffixes, and incorporated elements of subordinate parts of speech, are so combined as to furnish the most delicate shades of expression, such as the English language has only acquired at a late stage by means of its auxiliary verbs: and all this in the language of a people not only without letters, but lacking the very rudiments of civilization, in so far as that is dependent on a knowledge of the arts.

The euphonic changes which mark the systematic transitions in the Mohawk language, though by no means peculiar to it, cannot fail to awaken an interest in the thoughtful student, who reflects on the social condition of the people among whom this elaborated vehicle of thought was the constraining power by means of which their chiefs and elders swayed the nations of the Iroquois confederacy with an eloquence more powerful and persuasive than that of many civilized nations. They have been illustrated in the verb; but the same systematic application of euphonic change through all the transitions of their vocabulary is seen in the elaborate word-sentences, so characteristic of the extreme length to which the incorporating mode of structure of the Turanian family of languages is carried in many of those spoken by the American nations. The habitual concentration of complex ideas in a single word has long been recognized, not only as giving a peculiar character to many of the Indian languages, but as one source of their adaptability to the aims of native oratory. From the Massachusetts Bible of Eliot, Professor Whitney quotes a word of eleven syllables; and Gallatin produces from the Cherokee another of seventeen syllables. This frequently embodies a descriptive holophrasm, and so aids the native rendering of novel objects and ideas into a language, the vocabulary of which is necessarily devoid of the requisite terms. But in such cases the agglutinative process is obvious, and the elements of the compounded word must be present to the mind of speaker and hearer. The English word "almighty" is itself an example of the process. It becomes in the Mohawk Prayer Book *seshatsteaghseragwekonh*, from *seshatsteh*, "you are strong," and *ahkwekonh*, "all," or "the whole." When the missionaries first undertook to render into the Mohawk language the gospels and service books for Christian worship, it

may be doubted if many of their converts had ever seen a sheep. But they had to reproduce in Mohawk this general confession: "We have erred and strayed from Thy ways like lost sheep." They did it accordingly in this fashion: *Teyagwaderyeadawearyesneoni yoegwatha-haragwaghtha tsisahate tsinigouht godiyadaghtoeouh teyodinakaroetocha*, which may be literally rendered: "We make a mistake, and get off the track where your road is, the same as strayed animals with small horns." The extreme literalness of the rendering may probably strike the mind of the English reader in a way that would not occur to the Indian, familiar with such descriptive holophrasms. But it illustrates a difficulty with which Eliot was very familiar when engaged on his Massachusetts Indian Bible. In translating, for example, the song of Deborah and Barak, where the mother of Sisera "cried through the lattice," the good missionary looked in vain in the Indian wigwam for anything that corresponded to the term. At length he called an Indian and described to him a lattice as wicker work, and obtained in response a rendering of the text which literally meant: "The mother of Sisera looked through an eel-pot." It was the only kind of wicker-work of which the Indian had any knowledge. But such difficulties are trifling compared with the ideas involved in theological phraseology, such as necessarily occur in the Creeds, the Te Deum, or the Litany. For example, the sentence: "When thou tookest upon thee to deliver man," as rendered in the Litany, has the word "deliver" reproduced in Mohawk by *aoesaghsheyadakoh*, which is formed of *ahounsasko*, "to get," or "bring," and *ohyada*, "a body." As to the Mohawk equivalent for "womb," in the same sentence, *kanegweadakonh*, it need not surprise us to find that its literal significance is "in the belly." The word, "responses," which in its peculiar liturgical significance was not to be looked for in the Mohawk vocabulary, is rendered *tehadirighwawearonhs*, or literally, "first one and then the other."[1] The name for "heaven" is borrowed from the visible blue sky; *oronya*, "blue," —in the Huron, *aronhia*; *karonhyakonh*, "in the blue," *i.e.*, heaven; though in speaking of heaven it is more usual to say *karonyakeh*, "on the blue;" so also *karonyakerononh*, "being of the blue," or "of heaven," *i.e.*, heavenly.

The examples of different Huron-Iroquois versions of the Lord's Prayer here produced will help to illustrate the character of some of the leading forms of its dialects. But the remark with which Mr. Hale, in the introduction to "The Iroquois Book of Rites," concludes his instructive analysis of the formation of the Iroquois language, is worthy of special note. After indicating the marvellous preservation of grammatical forms, not less elaborate than those of Sanskrit or Greek, among unlettered tribes, he adds: "What is still more remarkable, a comparison of the Iroquois with the Huron grammar, shows that, after a separation which must have exceeded five hundred years, and has probably exceeded twice that term, the two languages differ less from one another than the French of the twelfth century differed from the Italian, or than the Anglo-Saxon of King Alfred differed from the contemporary low German speech."[2]

The first of the following versions of the Lord's Prayer is of special interest as a specimen of the Huron language in a translation executed within twenty-five years after the destruction of the Huron settlements on the Georgian Bay. The copy which I possess

[1] When crossing the ocean in the S.S. Sardinian, I was amused to hear the late Captain Dutton direct his seamen, when assembled for religious service, to sing *port and starboard*,—a sailor's rendering of antiphonal.

[2] The Iroquois Book of Rites, p. 113.

is authenticated by M. Paul Picard TsaSenhohi, son of the late Huron chief, Tahourenché, and is accompanied by the following memorandum, from the pen of the Reverend Father, by whom it has been transcribed for me: "Je soussigné certifie que la langue Huronne n'a pas changée. C'est la même langue qui était parlée en 1673, nous n'avons pas d'autre *Pater* que celui, qui a été écrit par le Révérend père Jésuite Chaumonot, qui résidait à l'ancienne Lorette avec le Révérend père Jésuite Pierre Martin Bouvart, Procureur des Missions. JOSEPH GONZAGUE VINCENT HODELONROSANNEN."[1] A comparison of this specimen of the Huron language, derived from one of the Jesuit missionary Fathers of the seventeenth century, with the subsequent Mohawk and Iroquois versions of the Lord's Prayer, wherever the same terms are used, serves to illustrate some of the modifications that the language has undergone in the course of time and from the dispersion of the race. This is seen in such words as the Huron *aronhia,e*, which in the Iroquois becomes *karonhiake*, and in the Mohawk *karonhyakonh*. The old form *hetsitron* is similarly changed to *tesiteron* in the Iroquois, and to *teghsideronh* in the Mohawk; and so in other instances.

Aiesachiendaensken, as here used, means strictly "mayst thou have an exalted," or "honoured, name" It is the same word as the Iroquois *aiesasennaien*. The termination *sken* is a sign of the optative mood in the Huron. *AiaSakSastasken* appears to mean "may we be made happy, "or" blessed;" and, as such, is a very mundane rendering of "thy kingdom come;" but the whole version partakes of the character of paraphrase. *Nondende* is made up of *ne*, "the," *ende*, "earth," and the locative suffix *nde*. *anontasken* and *taSannont* are from *annonten*, "to give." As to the translation of the simple petition for daily bread, it seems as though two attempts at rendering it into Huron had been made; and both of them retained, with the adverb *iθondi*, "also," to indicate the second form as a another version of the first. But there is reason to suspect that the text has suffered, probably in repeated transcription. Some of the words can only be conjecturally rendered, in their uncertain orthography. The comma in the body of a word represents the sound of *y*, when it stands for a primitive *k* which has been lost by phonetic decay; or is slurred over in indistinct utterance. Thus *ta,Sa,arennien* is in its primitive form *takSakSkarennien*.

THE LORD'S PRAYER IN HURON.

Sk8a	isten	de, aronhia,e	hetsitron	aiesachiendaensken		aiaSakSastasken	
Our	*father*	*in the heaven*	*thou art sitting, or abiding,*	*may thy name be exalted.*		*may we be made happy.*	
aronhia,e	aiesendaieratasken		nondende	ia,Ses θosken	haiaSenk	etiesendaierati.	
in heaven	*thou mayst have they will,*		*on the earth*	*in like manner*	*may it happen*	*that thou hast thy will.*	
TaSannontasken		exentate	ondaie	d'oraSenstakSi	n'onSennonkSat	taSannont	iθondi
mayst thou give		*from time to time*	*that*	*which is needful*	*for our life;*	*give us*	*also*
d'ateSentate	d'aionnhekSi.		Sasandi,onrhenk	nonSariSadera,i	θoskenaiaSen	n'endlitsonSadi,onrhens	
for the day	*that which makes to live.*		*Pardon us*	*our wrong-doings*	*as*	*we pardon*	
n'onxhiatolati	ennonchien		eon,Sasichen	nia	de,ariSaderai'	aSeti	ta,Sa,arennien	d'okaot.
those who offend us.	*let not*		*overcome*	*us*	*the sin*	*all*	*turn from us*	*the evil.*

In the year 1880, the Upper Canada Bible Society undertook the publication of the four gospels "in the Iroquois language." In the report of the Society for that year it is

[1] It is thus described: "Oraison Dominicale extraite d'un manuscrit très-ancien attribué au Révérend Père Chaumonot, Jésuite, qui était au Village de L'ancienne Loretto avec les Hurons en l'année 1673." My obligations are due to J. M. LeMoine, Esq., for kind services in aiding me to procure this copy.

stated: "The directors have ascertained that there are several thousand of this tribe in both Quebec and Ontario, and that Chief Joseph (Onesakeurat) of Oka, the translator, is quite competent thus to give, with their help, a good and useful version of the Gospels to his own people." The report of the following year states that an edition of a thousand copies had been printed. The Oka Indians, in so far as they are Iroquois, are descendants of the Indians of the Five Nations who, under the influence of the French missionaries left their own people, and removed to Lower Canada. They were chiefly Mohawks, but included representatives of the other "nations." The language which they still speak is substantially the same as the Mohawk, though with characteristic local modifications. Chief Joseph in his translation employs the printer's substitute of the cypher 8 which was introduced at an early date by the French missionaries to represent both the French *ou* and the English *w*. Proper names, such as Abraham, Jacob, Mary, etc., are printed for the most part, with the labials, in ordinary type. But where the true Indian orthoepy is reproduced, "Matthew" becomes *8atio*; thus "Joseph, the husband of Mary," is rendered *8ose n'8n8ari*; and the same influence of the absence of the labials is seen in the forms which such names occasionally assume in the old Mohawk Prayer Book, *e.g.* *Wary* for "Mary," *Agwereah* for "Abraham," etc.

Chief Joseph Onesakeurat was educated at St. Mary's College, Montreal, and was for a time employed as secretary by the Sulpician Fathers at Oka. On subsequently joining the Methodist Church, he studied for four years in preparation for missionary work among his own people, so that his translation must be accepted as the work of an educated native Iroquois. A comparison between the language of this recent translation and that of the old Mohawk Prayer Book is full of interest. At a first glance the difference appears to be much greater than proves to be the case on close investigation; and is due, in a large degree, to mere variations in orthography, such as are inevitable wherever two or more students attempt independently to reduce an unwritten language to definite form. Thus we find *tak8aienha*, *takwayenha*; *non8entsiake*, *neonwenjake*, etc. Other changes involve a little more modification of the words; e.g., *kari8aneren*, *karihwanerunh*; the *aiesasennaien* of the eastern Iroquois, would be in the Mohawk *ahyesasunriyosteh*, etc.; but only one word in the following Iroquois version of the Lord's Prayer deviates essentially from the Mohawk. That is *tak8ari8ak8iten*, which I had rendered, from its place in the context, "lead us." Its probable derivation and true significance are discussed below. The Mohawk equivalent would be *takwas'hariniht*. Situated as the scattered members of this old race now are, widely severed, and precluded from intercourse, such dialectic diversities must tend to increase. Changes both in diction and grammatical forms have necessarily arisen, not only from the long separation of the Iroquois of eastern Canada from their western congeners, but also from their admixture with Onondagas and others speaking different dialects; nevertheless the language is still substantially the same. The French missionaries, recognizing the fact already noted, that in none of the Iroquois languages is any distinction made between the *d* and *t*, the *g* (hard) and *k*, or the *o* and *u*, have simplified the alphabet by using only the *t*, *k*, and *o*. The *h* is used for the aspirate, though sometimes it is the sign of the gutteral *ch*; and the *en* and *on* represent nasal sounds familiar to the French ear. The English orthography of the language is at once more complex and less consistent with its orthoepy, in the effort to represent unfamiliar Indian sounds. In the Rev. J. A. Cuoq's "Lexique de la Langue Iroquoise," he gives "*Kahnawake*,

Sault St. Louis, nom de lieu dont l'orthographe Anglaise a fait *Caughnawaga.*" So also *Kanata*, a "town" *i.e.* Canada. From this diversity in spelling such changes result as the French *kahiatonsera*, English *kahyadonhsera*, "book;" *k8anoronk8a*, "beloved" (lit. "you whom we love"), in the old Mohawk Prayer Book *gwanoronghkwa*, and in the modern orthography *gwanoronhkwa*. So also *tesek ne sanakta*, "take up thy bed," of the modern Iroquois gospels becomes *desegh'k ne sanakda;* and *sasatenti tsi tisanonsote*, "go into thy house," is rendered *sasaghdundy tsidesanonghsode*. Thus a transliteration of the old French and the modern English versions greatly reduces the apparent dissimilarity between the two specimens of Mohawk or Iroquois. These variations, mainly due to a difference in the orthographic modes of representing the same sounds, but also indicative of changes in pronunciation, are further illustrated in their numerals. This will be seen by a comparison of the series here given, with those in the preceding tables. They have been furnished to me by J. A. Dorion, an educated native Iroquois who is now the teacher at the Oka Indian school:—

1, enska.	5, wisk.	9, tioton.
2, takeni.	6, iaiak.	10, oieri.
3, asen.	7, tsiatak.	20, tewashen,
4, kaieri.	8, satekon.	100, enska-tewenniawe.

But, in addition to the apparent dissimilarity arising from variations in orthography; the dialectic differences, produced by upwards of a century of separation between the Mohawks of eastern and western Canada, throw an interesting light on the more comprehensive process of change which resulted in the older dialects of the Six Nations, and the difference of all of them from the Huron tongue. The following is the Oka Iroquois version of the Lord's Prayer as it occurs in the 6th chapter of the Gospel of Matthew:—

THE LORD'S PRAYER FROM THE IROQUOIS GOSPELS.

tak8aienha ne karonhiake tesiteron, aiesasennaien aiesa8enniiostake
Our father in the heaven thou art abiding, may thy name be exalted; may thou be obeyed as sovereign;

aiesa8ennarak8ake non8entsiake tsinitiot ne karonhiake tiesa8ennarak8a
may thou have thy will done on the earth like as in heaven thou hast thy will done;

tak8anont ne kenh 8ente iakionnhek8en niate8enniserake sasanikonrhen ne ionk8ari8aneren
give to us this day what we live on every day; forget what we have done wrong,

tsi niiot nii tsionk8anikonrhens nothenon ionkhinikonraksata nok tosa
like as we we also forget anything (wherein) any one offend us; and not

aionk8asenni ne kari8aneren ehren tanon tak8ari8ak8iten ne iotaksens aseken
may it overcome us the wrong-doings, away but remove from us what is evil become;

ise ne tsiniienhen8e ensenakereke kasastensera oni kanentonsera iah
thou for ever wilt abide in power and glory no

takari8entane
end, or more literally, not wear out.

Some features in this version are worthy of note. The *ne* here is generally the definite particle; *ke*, is the locative particle. *Oronhia*, or Huron *aronhia,e*, as already noted, is "blue;" *karonhia*, "in the blue," *i.e.*, heaven; *nonwentsiake*, "on," or "in the earth:" *onwentsia*, with the definite particle prefixed, and the locative particle as a suffix. *Aiesasennaien*, "may thy name be exalted," is from *kasenna*, "name," with the verbal prefix *aiesa* marking the second person singular of the subjunctive mood. *Takwanont* is from *on*, "to give," prece-

ded by the composite pronoun *takwan*. The word *kanikonoha*, "mind," is found in a number of derivations and compounds, as in *ionkhinikonraksata*, rendered freely "wherein any one offends me," or "makes a bad mind." The *aksata* is from *aksen*, "bad;" as also *iotaksens*, "it is evil," comes from the same root. *Kasastensera*, "power," is from *kesaste*, "to be strong;" *kanentonsera*, "glory," is from *kennonton*, "to admire;" the *sera* added to the root-word gives it the value of an abstract noun, as, in the English, "strong" becomes "strength."

Takwariwakwiten is a compound which puzzled me; and on consulting Dr. Oronhyatekha he replied that he knew of no such word in the Mohawk language. It is, therefore, an Oka holophrasm; which, from its place in the context, must mean "lead from us," or some such idea. Mr. Hale suggests that it is a compound of *kariwa*, "thing," or "act," as in *kariwaneren*, "wrong-doings," and *khawitha* "to remove," or "put aside." If so, it expresses in a word the entire petition, "deliver us from evil."

The following version of the Lord's Prayer is from the Mohawk Prayer Book still in use among the Six Nation Indians on the Grand River, western Ontario; but which, as a translation, is fully one hundred and seventy years old. A comparison of it with the more recent Iroquois translation is interesting in various ways. First there are the slight variations noticeable in the same, or nearly similar words. *Shoegwaniha*, "Our Father," of the one, becomes in the other *takwaienha*; the *karonhyakonh*, "in heaven," of the older version, has apparently acquired a slight change in pronunciation in the *karonhiake* of the latter. Again, the *ne-oughweatsyake*, "on," or "in the earth," becomes *nonwentsiake*; and so with other words. There are also interesting examples of different attempts at expressing the same idea, as: *waonkhiyatswatea*, literally "those who hinder us," or "get in our way," for which the other substitutes *ionkhinikonraksata*, the composition of which has already been shown, and which may be rendered here "any one (who) offends us." The complex holophrasms are, on the whole, more numerous in the older version; but it has also its abbreviations, as in the *tsioni-nityonht*, "as it is," which, when repeated, assumes the contracted form of *tsiniyonht*.

THE LORD'S PRAYER IN MOHAWK.

Shoegwaniha	karonhyakonh	teghsideronh	wagwaghseanadokeaghdiste	Sayanertsherah	
Our Father	*in heaven*	*sitting in, or living in,*	*we make thy name holy.*	*Thy dominion*	
aoedaweghte	tsineaghsereh	egh	neayaweane	ne-oughweatsyake	tsioni-nityonht
may it come	*as thou desirest,*	*so*	*let it happen*	*on earth*	*as it is*
ne-karonhiyakonh	takyonh	ne keagh	weghniserate	ne-niyadeweghniserake	oegwanadarok
in heaven,	*give us*	*this*	*day*	*every day*	*our bread,*
neoni	toedagwarighwiyostea	ne-tsiniyoegwatswatough	tsiniyonht	ne-oekyonhha	tsitsyakhirighwiyosteanis
and	*forgive us*	*our transgressions*	*as it is*	*with us*	*we forgive them*
ne-waonkhiyatswatea	neoni	toghsa	tagwaghsharinet	tewadadeanakeraghtoeke	nok
those who hinder us, or get in our way;	*and*	*do not*	*lead us*	*temptation in,*	*but*
toedagwayadakoh	tsinoewe	niyodaxheah	ikea	ieso	saweank
redeem us, or save us,	*where*	*it is evil;*	*because*	*thou*	*thy*
ne-kayanertsherah	neoni	ne-kashatsteaghsera	neoni	ne-o-weseaghtshera	tsiniyeaheawe
kingdom	*and*	*power*	*and*	*glory, happiness,*	*forever*
neoni	tsiniyeaheawe.				
and	*forever.*				

If any student of American ethnology to whom the foregoing remarks present features of interest, will spread before him a map of the northern continent, and trace out the wanderings of the Huron-Iroquois race as here indicated, he must revert in fancy to

that remote century when confederated Iroquois and Algonkins swept in triumphant fury through the wasted valley of the Ohio, and repeated there what Goth and Hun did for Europe, in Rome's decline and fall. The long-settled and semi-civilized Mound-Builders, or Alligéwi, as we are learning to call them, fled before the furious onset, leaving the great river-valley a desolate waste. The barrier of an old-settled and well-organized community, which, probably for centuries, had kept America's northern barbarians in check, was removed; and the fierce Huron-Iroquois stock ranged at will over the eastern regions of the continent, far southward of the North Carolina river-valleys, where the Nottoways and Tuscaroras found a new home. As to the Nottoways, they appear to have passed out of all rememberance as an Iroquois tribe; yet it is suggestive of a long-forgothen chapter of Indian history, that the name is still in use among the northern Algonkins as the designation of the whole Iroquois stock. The Nottawa-saga is, doubtless, a memorial of their presence on the Georgian Bay; and the Notaway (*Náhdahwe*) River which falls into Hudson Bay at James Bay, is so named in memory of Huron-Iroquois wanderers into that Algonkin region.

Some portion of the ancient Huron stock tarried on the banks of the St. Lawrence, in what is known to us now as the traditional cradle-land of those Canadian aborigines. Others found their way down the Hudson, or selected new homes for themselves on the rivers and lakes that lay to the west, till they reached the shores of Lake Erie; and all that is now the populous region of Western New York was in occupation of the Iroquois race. Feuds broke out between them and the parent stock in the valley of the St. Lawrence. They meted out to them the same destruction as to strangers; and the survivors, abandoning their ancient home, fled westward in search of settlements beyond their reach. The Georgian Bay lay remote from the territory of the Iroquois, but the nations of the Wyandot stock spread beyond it, until the Niagara peninsula and the fertile regions between Lake Huron and Lake Erie were occupied by them, and the Niagara river alone kept apart what were now hostile tribes. But wherever we are able to apply the test of linguistic evidence their affinities are placed beyond dispute. On the other hand, the multiplication of dialects, and their development into separate languages, are no less apparent, and in many ways help to throw light on the history of the race.

The old Huron mother-tongue still partially preserves the labials which have disappeared from all the Iroquois languages. The Mohawk approaches nearest to this, and appears to be the main stem from whence the other languages of the Six Nations have branched off. But the diversities in speech of the various members of the confederacy leave no room to doubt the prolonged isolation of the several tribes, or "nations," before they were induced to recognize the claims of consanguinity, and to band together for their common interest. Some of the diversities of tongue, specially noteworthy, have already been pointed out, such as the *r* sound which predominates in the Mohawk, while the *l* takes its place in the Oneida. In the Onondaga, Cayuga, and Seneca, they are no longer heard. The last of these reduces the primary forms to the narrowest range; but beyond, to the westward, the old Eries dwelt, speaking it may be presumed, a modified Seneca dialect, but of which unfortunately no record survives. As to the Tuscaroras and the Nottoways, if we knew nothing of their history, their languages would suffice to tell that they had been longest and most widely separated from the parent stock.

It is not without interest to note in conclusion that the main body of the representatives of the nations of the ancient Iroquois League, sprung from the Huron-Iroquois stock of eastern Canada,—after sojourning for centuries beyond the St. Lawrence, until the traditions of their origin had faded out of memory, or given place to mythic legends of autochthonic origin,—has returned to Canadian soil. At Caughnawaga, St. Regis, Oka, and on the River St. Charles, in the province of Quebec; at Anderdon, the Bay of Quinté, and above all, on the Grand River, in Ontario; the Huron-Iroquois are now settled to the number of upwards of 8,000, without reckoning other tribes. If, indeed, the surviving representatives of the Aborigines in the old provinces of the Dominion are taken as a whole, they number upwards of 34,000, apart from the many thousands in Manitoba, British Columbia, and the Northwest Territories. But the nomad Indians of the Northwest must be classed wholly apart from the settlers on the Grand River reserves. The latter are a highly intelligent, civilized people, more and more adapting themselves to the habits of the stranger immigrants who have supplanted them; and are destined as certainly to merge into the predominant race, as the waters of their ancient lakes mingle and are lost in the Ocean. Yet the process is no longer one of extinction, but of absorption; and will assuredly leave enduring traces of the American autochthones, similar to those which still, in the Melanochroi of Europe, perpetuate some ethnical memorial of its allophylian races.

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